

ATTACHMENT 1

DAC
ZHW

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1480
ALEXANDRIA, VA 22313-1480
WWW.USPTO.GOV

AUG 30 2005

Wilbur E. Harrison, Jr.
1581 Perdido Court
Melbourne FL 32940

BEST AVAILABLE COPY

In re Application of
Wilbur E. Harrison
Application No. 10/065,872 ✓
Filed: November 26, 2002
For: HARRISON FREE STANDING TOWERS
AND MISSILE DEFENSE SYSTEM

**DECISION ON PETITION
TO WITHDRAW THE
HOLDING OF ABANDONMENT**

This is in response to applicant's letter received in the United States Patent and Trademark Office (USPTO) on March 01, 2005. This letter is being treated as a petition to withdraw the holding of abandonment under 37 CFR 1.181. There is no fee for this petition.

The petition is **DENIED**.

A review of the file record indicates a Notice of Abandonment was mailed on January 26, 2005 for failure to properly respond to the Office Action mailed July 16, 2005 which set forth a three-month, extendable period in which to respond.

Applicant requests withdrawal of holding of abandonment as he contends that a response was timely filed August 23, 2004. Applicant provides a copy of the response as "Attachment C"

There is no record of a August 23, 2004 response in the file and Applicant has failed to provide any acceptable evidence of this response. Acceptable showings include: a date stamped post card receipt, a proper certificate of mail or transmission under 37 CFR 1.8 (MPEP 512), a proper express mail under 37 CFR 1.10 (MPEP 513), and a proper facsimile transmission of a CPA under 37 CFR 1.6 (MPEP 502.01). Also, the copy of the response proved as "Attachment C" is unsigned. As a true copy of the alleged response is required with the instant petition, the response would not have been proper for being unsigned. Further, it appears from wording in the subject line of the response provided as "Attachment C", that the response was intended to be "unofficial" for interview purposes only. Such a response could not have been considered a proper official response to the Office Action mailed July 16, 2005.

A copy of Guidelines on Submissions for Pro Se Applicants is attached to assist Applicant with any future submissions.

It is noted that the correspondence received March 16, 2005 and May 09, 2005 appears to be related to applicant's application serial number 10/939,297, which is a C-I-P of the instant application. Note that all correspondence related to this application should

reference it by its own serial number which is different than that of the instant application as they are separate entities.

Applicant may wish to consider filing a petition to revive under 37 CFR 1.137(a) (unavoidable delay) or 37 CFR 1.137(b) (unintentional delay) as discussed below.

I. Unavoidable Delay

A grantable petition to revive an abandoned application under 37 CFR 1.137(a) must be accompanied by: (1) the required reply (unless previously filed), which may be met by the filing of a continuing application in a nonprovisional application abandoned for failure to prosecute; (2) the petition fee required by 37 CFR 1.17(l), and (3) an adequate showing to the satisfaction of the Commissioner that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to 37 CFR 1.137(a) was unavoidable.

The showing requirement can be met by submission of statements of fact establishing that the delay in filing the reply was unavoidable. This includes a satisfactory showing that the cause of the delay resulting in failure to reply in a timely fashion to the Office action was unavoidable. Diligence during the time period between abandonment and filing of the petition to revive must also be shown.

As an alternative to filing a petition for unavoidable abandonment, a petition for revival of an application abandoned unintentionally under 37 CFR 1.137(b) might be appropriate.

II. Unintentional Delay

A grantable petition to revive an abandoned application under 37 CFR 1.137(b) must be accompanied by: (1) the required reply (unless previously filed), which may be met by the filing of a continuing application in a nonprovisional application abandoned for failure to prosecute; (2) the petition fee required by 37 CFR 1.17(m); and (3) a statement that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to 37 CFR 1.137(b) was unintentional.

If not previously filed, the reply to the outstanding Office action must accompany the petition to revive. The required items should be promptly submitted under a cover letter entitled "Petition to Revive."

Further correspondence with respect to a petition to revive should be addressed as follows:

By Mail: Deputy Commissioner of Patent Examination Policy
Box 1450
Alexandria, VA 22313-1450


By Fax: (571) 273-8300

Attn: Office of Petitions

By Hand: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Telephone inquiries should be directed to the Office of Petitions Staff at (571) 272-3282.

Any request for reconsideration of this decision must be submitted within TWO (2) MONTHS from the mail date of this decision. Extensions of time under 37 CFR 1.136(b) are permitted. The reconsideration request should include a cover letter entitled "Renewed Petition to Withdraw the Holding of Abandonment Under 37 CFR 1.81."


Steven N. Meyers
Special Programs Examiner
Patent Technology Center 3600
(571) 272-6611

SNM/rjc 08/18/05

ATTACHMENT: Pro Se Correspondence Guidelines.

BEST AVAILABLE COPY

It appears that the applicant in this application is a *pro se* applicant (an inventor filing the application alone without the benefit of a Patent Attorney or Agent). Applicant may not be aware of the preferred methods of ensuring timely filing of responses to communications from the Office and may wish to consider using the Certificate of Mailing or the Certificate of Transmission procedures outlined below.

CERTIFICATE OF MAILING

To ensure that the Applicant's mailed response is considered timely filed, it is advisable to include a "certificate of mailing" on at least one page (preferably on the first page) of the response. This "certificate" should consist of the following statement:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on (date).

(Typed or printed name of the person signing this certificate)

(signature)

CERTIFICATE OF TRANSMISSION

Alternatively, if applicant wishes to respond by facsimile rather than by mail, another method to ensure that the Applicant's response is considered timely filed, is to include a "certificate of transmission" on at least one page (preferably on the first page) of the response. This method should be used by foreign applicants without access to the U.S. Postal Service. This "certificate" should consist of the following statement:

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) _____ on (date).

(Typed or printed name of the person signing this certificate)

(signature)

These "Certificates" may appear anywhere on the page, and may be handwritten or typed. They must be signed, and the date must be the actual date on which it is mailed or transmitted. For the purpose of calculating extensions of time, the date shown on the certificate will be construed as the date on which the paper was received by the Office, regardless of the date the U.S. Postal Service actually delivers the response, or the fax is "date-stamped" in. In this way, postal or transmission delays do not affect the extension-of-time fee.

In the event that a communication is not received by the Office, applicant's submission of a copy of the previously mailed or transmitted correspondence showing the originally signed Certificate of Mailing or Transmission statement thereon, along with a statement from the person signing the statement which attests to the timely mailing or transmitting of the correspondence, would be sufficient evidence to entitle the applicant to the mailing or transmission date of the correspondence as listed on the Certificate of Mailing or Transmission, respectively.

NOTICE TO APPLICANT: In the case of lost or late responses the use of other "receipt producing" forms of mailing a correspondence to the Patent Office, such as Certified Mail, or a private shipper such as FedEx, **WILL NOT** result in the applicant getting the benefit of the mailing date on such receipts. These receipts are not considered to be acceptable evidence since there is nothing to "tie-in" the receipt with the particular document allegedly submitted.

----- **Attachment 2** -----

HAI

HARRISON A/E, INC.

226 Stonewall Road

Baltimore, Maryland 21228-5443, USA

PATENT CONFERENCE

DATE: AUGUST 25, 2004

Time: 10:45 A.M.

TO: Ms. Kimberly T. Wood, Patent Examiner, Art Unit 3632

C/O: Commissioner for Patents

P.O. Box 1450, Art Unit 3632

Alexandria, Virginia 22313-1450

CC: Mr. Leslie Braun, Supervisor, Art Unit 3632

—— FACSIMILE TRANSMISSION COVER SHEET ——

Date: August 23, 2004

TO: Ms. Kimberly T. Wood, Patent Examiner
Art Unit 3632, Re.: Application Control # 10/065,872
Fax: 1.703.308.3686
Telephone: 1.703.308.0539

LOCATION: Commissioner for Patents
P.O. Box 1450 Art Unit 3632
Alexandria, Virginia 22313-1450

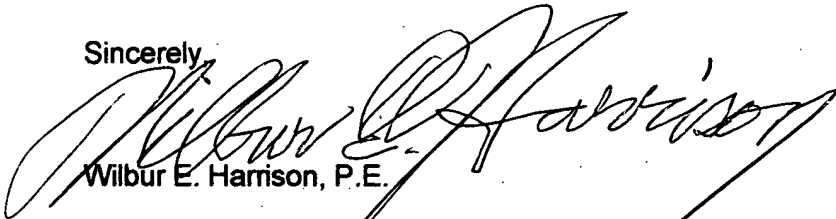
CC: Mr. Leslie Braun, Supervisor, Art Unit 3632.

FROM: Wilbur E. Harrison
FAX: 410-747-9936
TELEPHONES: O: 410-747-9935; H: 410-747-8325;
LOCATION: 226 Stonewall Road
Baltimore, Maryland 21228-5443

SUBJECT: This is a preliminary unofficial version of my Currently Amended Application dated August 20, 2004 prepared for our scheduled meeting for discussion on 08/25/04 at 10:45 a.m. concerning Patent Application Control # 10/065,872

COMMENTS: This is submitted in response to your Office communication dated 07/16/2004.

Sincerely,



Wilbur E. Harrison, P.E.

NUMBER OF PAGES INCLUDING COVER: 3

Microsoft Word; File: 498413.doc; saved in H.D.E, CD-RW #2, CD-R #2 & FD 145.

Wilbur E. Harrison
226 Stonewall Road
Catonsville, Maryland 21228-5443

Date: August 23, 2004

TO: Ms. Kimberly T. Wood, Patent Examiner
Art Unit 3632, Re.: Application Control # 10/065,872
Commissioner for Patents
P.O. Box 1450 Art Unit 3632
Alexandria, Virginia 22313-1450

Ms. Wood:

Attached is my preliminary revised currently amended Patent Application dated 08/20/2004 in response to your Office communication dated 07/16/04 for discussion during our scheduled meeting on 08/24/04 at . I have initiated the action summarized below:

1. I have removed all "new matter" from my two figures completely that are not specifically mentioned in my original specification, which was submitted using USPTO software on line on November 26, 2002. Upon reflection, I must admit that you are correct in this matter.

2. I have removed all words from my currently amended Patent Application, dated 08/20/04, that I could not find in my original application which was accepted by USPTO software on line on November 26, 2002. Again, upon reflection, I must admit that you are correct in this matter also.

As an example, I have made the following changes to the two Figures included with my Patent application:

Figure 1: notations 1, 2, 3, & 4 have been left because I could find specific words about these notations in my original spec. submittal. Items 5, 7, & 8 have been removed as being "new matter" because I could not find these items specifically mentioned in my original spec. Notations 9 and 10 are general information notations on all Figures or drawings. I could remove Notations 9 and 10 and those in the design or construction business could still build the invention.

Figure 2: All detail notations have been removed from Figure 2 because I found no mention of these details in my original submittal. I left Figure 2 in my submittal because I had mentioned gyroscopes often in my initial submittal. However I could delete Figure 2 if you wish. Please advise.

As far as the rest of my currently amended submittal dated 08/20/04, I deleted all words that I could not find in my original submittal dated 11/26/02. Rather than go through each word and phrase here, I shall come prepared to do so at our meeting, as and if requested.

Sincerely,


Wilbur E. Harrison, Jr., P.E.

Ms. Kimberly T. Wood, Patent Examiner
August 23, 2004

Page 2

CC: Mr. Leslie Braun, Supervisor, Art Unit 3632
C/O: Commissioner for Patents
P.O. Box 1450, Art Unit 3632
Alexandria, Virginia 22313-1450

Microsoft Word; File: 498413.doc; Saved to HD E, CD-RW #2, CD-R #2 & FD # 145.

INVENTION: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr. 226 Stonewall Road, Catonsville, MD 21228-5443

Application Control No. 10/065,872

Filed: Nov. 26, 2002

References Cited

U.S. PATENT DOCUMENTS

None.

OTHER PUBLICATIONS

Arnold, Ronald N., and Leonard Maunder, *Gyrodynamics and Its Engineering Applications*, New York and London: Academic Press, Inc., 1961.

Burger, W., and A. G. Corbet, *Ship Stabilizers, Their Design and Operation in Correcting the Rolling of Ships; A Handbook for Merchant Navy Officers*, London: Pergamon Press Ltd., 1966.

Crabtree, Harold, *An Elementary Treatment of the Theory of Spinning Tops and Gyroscopic Motion*, 3rd ed., New York: Chelsea Publishing Company, 1967.

Deimel, Richard F., *Mechanics of the Gyroscope*, New York: Deaver Publications, Inc., 1950.

Richardson, K. I. T., *The Gyroscope Applied*, London: Hutchinson's Scientific and Technical Publications, 1954.

Ross, James F. S., *The Gyroscopic Stabilization of Land Vehicles*, London: Edward Arnold & Co., 1933.

Scarborough, James B., *The Gyroscope, Theory and Applications*, New York and London: Interscience Publishers, 1958.

Schilovsky, P. P., *The Gyroscope: Its Practical Construction and Application*, New York: Chemical Publishing Corp. of N.Y., Inc., 1938.

www.mariner.connectfree.co.uk/html/gyro.htm Website about gyroscopes with diagrams and calculations.

Patent Examiner – Ms. Kimberly T. Wood

ABSTRACT

Gyroscopes-Stabilized Free Standing Towers and Defense Systems that support and contain surveillance radar, communication systems and defensive weapon systems against cruise missiles, ICBMs, manned and unmanned aircraft, as well as defense of USA borders. The current invention shall provide the lowest cost option for positioning systems where look down surveillance, look-over -the-natural horizon surveillance, look-up surveillance and high electric power requirements are a major consideration.

1 Claim, 2 Drawing Sheets

Inventor: Wilbur E. Harrison, Jr.

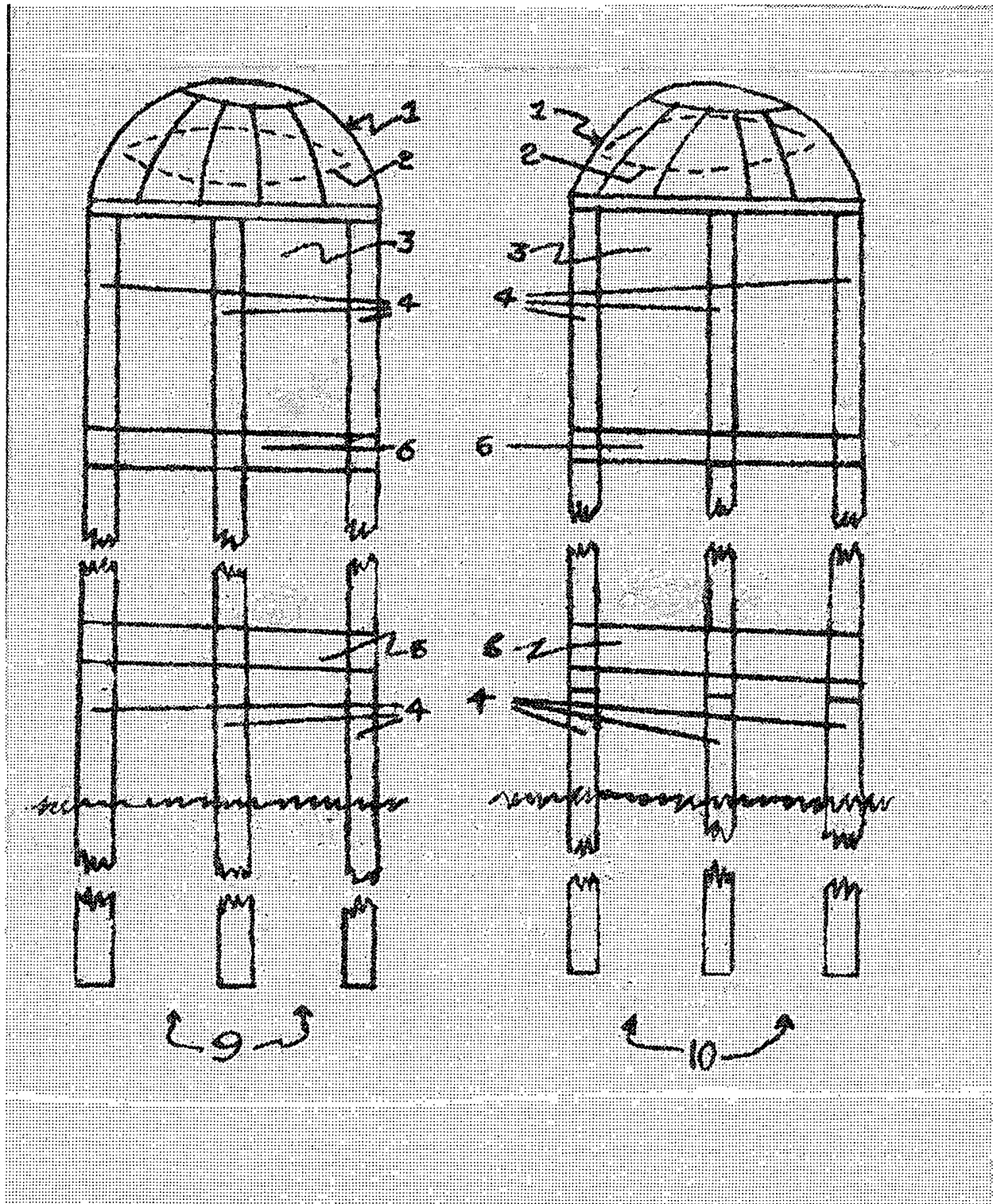


Fig. 1

Scale: 1/16 Inch = 1.0 foot

Inventor: Wilbur E. Harrison, Jr.

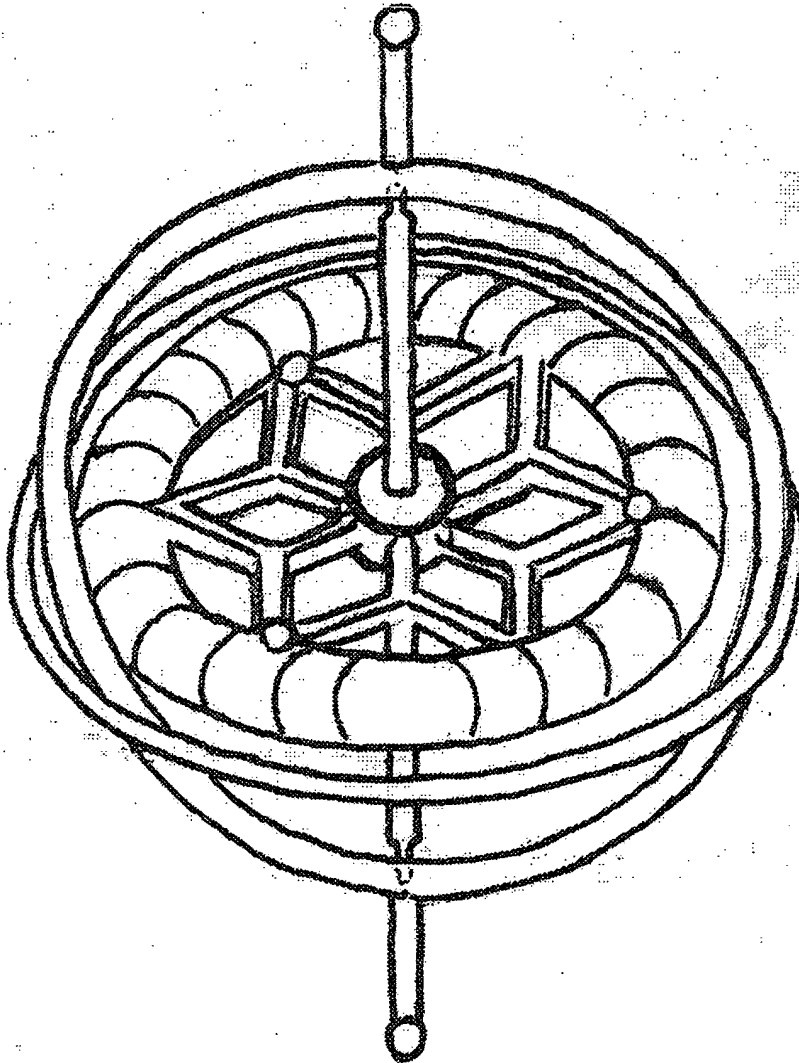


Figure 2
Scale: No Scale

HARRISON GYROSCOPES-STABILIZED FREE STANDING TOWERS AND MISSILE DEFENSE SYSTEMS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to gyroscopes-stabilized free standing radar and communications towers that support and contain radar antennas, radar equipment, communications equipment, electric power generating equipment and multiple defensive measures (including high energy laser cannons and other directed energy weapons and equipment needed to defend against unwanted and hostile terrorist or other enemy incursions by manned or unmanned aircraft, cruise missiles, ICBM's (Intercontinental Ballistic Missiles), or other unlawful incursions of USA borders, borders of USA allies, deployed armed forces of the USA and USA allies and other borders.

2. Description of the Prior Art

There is no Prior Art to the best of the knowledge of this inventor because the use of gyroscopes to stabilize high radar towers and communication towers that contain and support heavy defensive weapons are not listed or mentioned in the Prior Art. Thus, this application is not included in the public domain.

SUMMARY OF THE INVENTION

The current invention, shall be described subsequently in greater detail. Representative embodiments of the concepts of the present invention are illustrated in the drawings Fig. 1 and Fig 2.

The present invention consists of gyroscopes-stabilized free standing structural radar and communications high towers that support and contain radar antennas, radar equipment, communications equipment, electronic coordination systems, electric power generating equipment and multiple defense measures and equipment needed to defend the USA and USA Allies against hostile terrorist or other enemy incursions by manned aircraft or unmanned aircraft, cruise missiles, ICBMs and other types of illegal border violations. The present invention provides a near perfect long range defense against such threats. The current invention also provides the lowest cost option for positioning defensive systems where look down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. 1 is a perspective view of the current invention according to the first embodiment of the present invention.

FIG. 2 is a perspective view illustrating a gyroscope.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to FIG. 1 thereof, the following will be described:

FIG 1: More specifically, it will be noted that the first embodiment of FIG. 1 includes a perspective drawing of the towers. FIG. 1 shows the following: 1 the cable reinforced air supported structures that serve as protection for the following: 2. the radar antenna, radar equipment, communications equipment and other related equipment as required to detect and defend against incoming enemy missiles. 3. The location of the laser cannon (and other ordinance equipment and devices required as armament measures required to defend against incoming detected missiles and other threats. 4. The structural supports as required to support the towers are so indicated. 6. The some 10,000 lb. gyroscopes are schematically shown. 9. The front view is shown schematically, and 10. the side view is shown schematically.

FIG. 2 is a perspective drawing of a gyroscope.

Currently amended SPECIFICATION

[Electronic Version 1.2.8]

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems [System].

Detailed Description: Gyroscopes-Stabilized Free Standing Towers that support and contain anti-missile defense radar, communications systems and defensive weapons to protect the USA and it's Allies against enemy cruise missiles, ICBMs and manned or unmanned aircraft. Also this invention provides border defense for the USA and USA Allies. Defensive weapons would include, but not be limited [limited] to, anti-missile missiles, USA defensive aircraft, Directed Energy Weapons (but would not be limited to) HEL (High Energy Laser) weapons and HECW (High Energy Carrier Wave) weapons. The system described above would provide the lowest cost option for positioning defensive systems where look-down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements. The design technique would include:

1. The use of large (10,000 pound) gyroscopes to provide high tower stability, our search of the literature and the Internet – see our previous listing of References Cited OTHER PUBLICATIONS. [See our list of References as listed in Attachments: Attachment A] indicates no claims for the use of gyroscopes to stabilize high free standing radar towers, or communication towers. Thus, this application is not included in the public domain.
2. According to my [our] professional experience and calculations, these gyroscopes will be firmly secured to the towers every 100 feet, the gyroscopes axis of rotation will be the same as the tower vertical [verticle] center line, the gyroscopes will weigh some 10,000 lbs, (with most gyroscope rotor weight concentrated at the perimeter of the gyroscope) and the gyroscope's shall be rotating at 15,000 RPM.
3. The tower vertical structural supports shall be round in cross section, will be made of a clear material (such as Lucite) and will contain photo-electric panels to generate electric power.
4. The towers shall have wind power electric power generators attached as often as is practical. Our plan is to attach such wind power generators every 50 feet of tower height.
5. Radar antenna shall be attached at the top of the towers, and every 1000 feet of tower height. The antenna shall be protected via an air-supported cable reinforced structure. [similar to those shown in pictures on www.HAIholdings.com, (located on the Architectural & Engineering Page of the Website)].
6. An elevator shall be attached to each tower to enable access to the radar antenna, radar equipment and other servicing as needed.

CLAIMS:

1. [The use of large gyroscopes to stabilize Radar Towers, Communication Towers and towers designed for defense from cruise missiles, ICBMs, manned aircraft, unmanned aircraft (drones), and perimeter defense of all types.] (Withdrawn)
2. [The use of clear structural members (such as Lucite) suitable to contain photoelectric power panels suitable to generate significant electric power.] (Withdrawn)
3. [The use of wind power electric generators on high free standing towers for generating significant electric power.] (Withdrawn)
4. Remarks: I respectfully request that this claim Number 4 be approved, as amended, and as was suggested by the Patent Examiner, as follows:

4. The use of large heavy (10,000 pound) powerful gyroscopes to stabilized free standing towers to support radar antennas, communication equipment, defensive weapons against missiles and other border violations of USA borders and other equipment that incorporate the following: The use of large powerful gyroscopes to stabilize the towers; the use of clear structural members (such as Lucite) suitable to contain photoelectric power panels for the purpose of generating [suitable to generate] electric power; the use of wind power electric generators on the high free standing towers for generating electric power; the use of plastic clear cable reinforced air supported structures to protect radar antennas, radar equipment and other military defense equipment; and the use of elevators to construct, service and maintain high (1000 feet high and higher) free standing military, communication and commercial towers.
5. [The use of plastic clear air supported structures to protect radar antennas, radar equipment and other military defense equipment.] (Withdrawn)
6. [The use of elevators to construct, service and maintain high (1000 feet high and higher) free standing military, communication and commercial towers.] (Withdrawn)

Abstract of Disclosure: Gyroscopes-Stabilized Free Standing Towers and Defensive Systems that support and provide surveillance radar, communication systems and defensive weapon systems against cruise missiles, ICBMs, manned and unmanned aircraft, as well as USA border defense. The current invention shall provide the lowest cost option for positioning systems where look-down surveillance, look-over -the-natural horizon surveillance, look-up surveillance and high electric power requirements are a major consideration.

Acknowledgment Receipt:

SUBMISSION TYPE: Utility Patent Filing

APPLICATION NUMBER:10065872

FIRST NAMED INVENTOR: Wilbur Harrison

TITLE OF INVENTION: Harrison Free Standing Towers And Missile Defense System.

ATTORNEY DOCKET NUMBER: NONE

FILE LISTING:

transmittal	tranHarrisonFTTowerMislDefSys.xml 5Kb
bibd-transmittal	HarrisonFTTowerMislDefSysapds.xml 3Kb
bibd-transmittal	u-bibdat.dtd 34Kb
bibd-transmittal	e-bibdat.xml 23Kb
fee-transmittal	HarrisonFTTowerMislDefSysfee.xml 2Kb
fee-transmittal	u-feetra.dtd 37Kb
fee-transmittal	e-feetra.xml 15Kb
specification	Specification.xml 5Kb
specification	u-specif.dtd 103Kb
specification	specif.xml 29Kb

EFS ID: 20307

FILE SIZE: 52827 Bytes

TIMESTAMP: Tue Nov 26 23:05:49 EST 2002

MESSAGE DIGEST: JA4ZXjk4X7ZddWpHjp2Bew==

DIGITAL CERTIFICATE HOLDER NAME:cn=Wilbur Ernest Harrison, ou=Independent Inventors

UPLOAD STATUS: Reproduced Acknowledgment Receipt

Saved to Microsoft Word; File: 2980J.doc; saved to: HD C, HD E, CD-R #2, CD-RW #2 & FD #104.

SPECIFICATION

[Electronic Version 1.2.8]

Title of Invention: Harrison Free Standing Towers And Missile Defense System.

Detailed Description: Free Standing Towers that support and contain anti-missile defense radar, communications systems and defensive weapons to protect the USA and it's Allies against enemy cruise missiles, ICBMs and manned or unmanned aircraft. Also this invention provides border defense for the USA and USA Allies. Defensive weapons would include, but not be limited to, anti-missile missiles, USA defensive aircraft, Directed Energy Weapons such as (but would not be limited to) HEL (High Energy Laser) weapons and HECW (High Energy Carrier Wave) weapons. The system described above would provide the lowest cost option for positioning defensive systems where look-down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration. The design technique would include:

1. The use of large gyroscopes to provide tower stability. Our search of the literature and the Internet (See our list of References as listed in Attachments: Attachment A) indicates no claims for the use if gyroscopes to stabilize unsupported radar towers, or communication towers. Thus, this application is not included in the public domain.

2. According to our professional experience and calculations, these gyroscopes will be firmly secured to

the towers every 100 feet, the gyroscopes axis of rotation will be the same as the tower verticle center line, the gyroscopes will weigh some 10,000 lbs, (with most gyroscope weight concentrated at the perimeter of the gyroscope) and the gyroscopes shall be rotating at 15,000 RPM.

3. The tower vertical structural supports shall be round in cross section, will be made of a clear material (such as Lucite) and will contain photo-electric panels to generate electric power.

4. The towers shall have wind power electric power generators attached as often as is practical . Our plan is to attach such wind power generators every 50 feet of tower height.

5. Radar antenna shall be attached at the top of the towers, and every 1000 feet of tower height. The antenna shall be protected via an air-supported cable reinforced structure, similar to those shown in pictures on www.HAIholdings.com, (located on the Architectural & Engineering Page of the Website).

6. An elevator shall be attached to each tower to enable access to the radar antenna, radar equipment and other servicing as needed.

Claims:

- 1. The use of large gyroscopes to stabilize Radar Towers, Communication Towers and towers designed for defense from cruise missiles, ICBMs, manned aircraft, unmanned aircraft (drones), and perimeter defense of all types.**
- 2. The use of clear structural members (such as Lucite) suitable to contain photoelectric power panels suitable to generate significant electric power.**
- 3. The use of wind power electric generators on high free standing towers for generating significant electric power.**
- 4. The use of high free standing towers to support radar, communication and other antennas and equipment.**
- 5. The use of plastic clear air supported structures to protect radar antennas, radar equipment and other military defense equipment.**
- 6. The use of elevators to construct, service and maintain high (1000 feet higher and higher) free standing military, communication and commercial towers.**

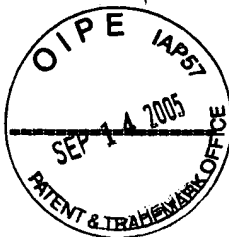
Abstract of Disclosure: Free Standing Towers and defensive systems that support and provide surveillance radar, communication systems and defense systems against cruise missiles, ICBMs, manned and unmanned aircraft by providing the lowest cost option for positioning systems where look-down surveillance, look-over -the-

natural horizon surveillance, look-up surveillance and high electric power requirements are a major consideration.

Microsoft Word; Drive E; File: 2980C.doc; Saved to:HD C,HD E,CD-RW #1,CD-R #1 & FD #104.

Both files Saved as Microsoft Word; File: 498412; Saved to HD C, HD E, CD-R #2, CD-RW #2 & FD # 145.

All Files combined into Microsoft Word; File: 498414.doc; saved to HD E, CD-RW #2, CD-R #2 & FD #145.



FACSIMILE TRANSMISSION COVER SHEET

Date: September 12, 2005

TO: Deputy Commissioner of Patent Examination Policy

Fax: 1 (571) 273-8300

Telephone: 1 (571) 272-3282

Box 1450

Alexandria, VA 22313-1450

Att: Office of Petitions

FROM: Wilbur E. Harrison, Jr.

FAX: (321) 253-8961

TELEPHONES: O: (321) 752-5489; Cellular: (321) 6529676

**LOCATION: 1581 Perdido Court
Melbourne, Florida 32940-6226, USA**

**SUBJECT: Renewed Petition to Withdraw the Holding of Abandonment
Under 37 CFR 1.81.**

Letter, date stamped AUG 30, 2005, received from:

Mr. Steven N. Meyers

Special Programs Examiner

**Patent Technology Center 3600 (Please see Attachment 1 to this document).
(571) 272-6611**

COMMENTS: Please see my attached letter. Thank you.

Sincerely,

Wilbur E. Harrison, Jr. P.E.

NUMBER OF PAGES INCLUDING COVER: 2

Microsoft Word; File: 5984252.doc; saved to Hard Drive E, CD-RW #1, CD-R #1 & FD #135.

**CERTIFICATE OF MAILING: I hereby certify that this correspondence is being
deposited with the United States Postal Service as first class mail in an envelope
addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
on: Date: 09/12/05**

Signature:

Wilbur E. Harrison, Jr.

CC: Ms. Kimberly T. Wood, Patent Examiner

**RECEIVED
OIPE/IAP**

SEP 22 2005



HAI

HARRISON A/E, INC.

MILITARY PROJECTS, ARCHITECTS, ENGINEERS, CONSTRUCTION MANAGERS AND CONTRACTORS

ENTERPRISE SOFTWARE-COMPUTERIZED CORPORATE MANAGEMENT SYSTEMS

RESEARCH AND DEVELOPMENT: MILITARY DEFENSE, MEDICAL AND ENVIRONMENTAL PRODUCTS

1581 Perdido Court

Melbourne, Florida 32940-6226, USA

Internet Sites: <http://www.HAIholdings.com>;

<http://www.enterprisesoftware-ccms.com>;

<http://www.harrison-ae.com>

email: harrison@harrison-ae.com

Telephones: O: (321) 752-5489; Cellular: (321) 652-9676

Fax: (321) 253-8961

Initial Date: September 08, 2005

Revised Date: September 12, 2005

Deputy Commissioner of Patent Examination Policy

Box 1450

Alexandria, VA 22313-1450

Att: Office of Petitions

SUBJECT: Renewed Petition to Withdraw the Holding of Abandonment

Under 37 CFR 1.81.

Letter, date stamped AUG 30, 2005, received from:

Mr. Steven N. Meyers

Special Programs Examiner

Patent Technology Center 3600 (Please see Attachment 1 to this document).

(571) 272-6611

Ladies and Gentlemen:

This Inventor is in receipt of your above listed SUBJECT letter (Please see Attachment Number 1 for a scanned copy of this letter). Please be respectfully advised of my comments below:

a. My response, dated 08/23/04, (see Attachment 2) to Ms. Kimberly T. Wood's Office Communication dated 07/16/04 was made as:

(1) A response to her Office Communication dated 07/16/04 and

(2) As a basis for discussion at our scheduled meeting on 08/25/04 at 10:45 am with her Supervisor Mr. Leslie Braun. I had requested the meeting, with Mr. Braun present. My objective was to resolve the interpretation of details (problems) between Ms. Wood, the Patent Examiner, and myself, the inventor-of-record. Present at the meeting were the following:

- 1. Mr. Leslie Braun, USPTO Supervisor**
- 2. Ms. Kimberly T. Wood, Patent Examiner**
- 3. Mrs. Jean Raney Harrison, my Wife**
- 4. Wilbur E. Harrison, Jr., the inventor of record**

Initial Date: September 09, 2005 Revised Date: September 12, 2005

Please Note: To facilitate discussion at our meeting mentioned above, I punched and bound my response of 08/23/04 to Ms. Wood into booklets, using 19 ring plastic binders, with heavy paper covers (Please see Attachment 2). This could explain why my response letter cannot be found in your file. Please note that I have signed your copy of Attachment 2. I shall be happy to send you a copy of my response (see Attachment 2) that is signed, notarized, punched and bound with a plastic 19 ring binder, if you wish.

b. After some discussion, Mr. Leslie Braun suggested an effective resolution to our several problems of interpretation as follows:

1. That I merely submit a CIP (Continuation In Part). This is entirely acceptable to the USPTO, with the details of my invention that Ms. Wood and I were at odds over. Naturally, I would also need to pay the USPTO an additional \$385.00 for the CIP as well as submit a signed USPTO Oath Form, plus an additional \$85.00 for the Oath; after which my Patent Application Control No. 10/065,872 and my CIP would be processed together. I had not heard that this was possible.

2. This suggestion was acceptable to everyone at the meeting.

3. It was my understanding that nothing more needed to be done except submit and pay for the CIP and the signed USPTO Oath Form.

4. The meeting then ended.

5. I then promptly submitted my CIP on 09/06/2004. Please see Attachment 3 to this letter. During our meeting on 08/25/04 I received the impression that some might be unfamiliar with why air supported structures work as well as the reason that Mylar Polyester Film has the tensile strength of steel, but not the weight of steel. Accordingly, I added Figures 4 and 5 to my CIP.

6. After 5 above, there did ensue a delay by the USPTO in charging my VISA Card for my CIP and my Oath Form submittal. Please see ATTACHMENT 6 for the resolution here.

7. After some significant delay and exchange of letters, (please see the following ATTACHMENTS 4, 5, 6, 7 & 8) there appeared to be some progress. Then, "out of the blue", your letter arrived.

8. According to the USPTO letter dated 05/12/2005 CONFIRMATION NO. 3442 (Please see ATTACHMENT 8), it appears to me that my CIP was given a separate APPL. NO. 10/939,297 and a Filing Date of 09/13/04. Is this correct? Also, listed was a Projected Publication Date: 08/18/05. Is this again on hold as a result of your letter? (Reference: ATTACHMENT 8). Is my Patent Application 10/065,872 11/26/2002 ABN delayed or on hold again? In the USPTO letter dated 05/12/05 (ATTACHMENT 8), there are these words: "This application is a CIP of 10/065,872 ABN" . I assume that this means that my CIP and my Patent Application are processed together, as explained during our earlier meeting on date 08/25/04 by Mr. Leslie Braun. Is this correct?

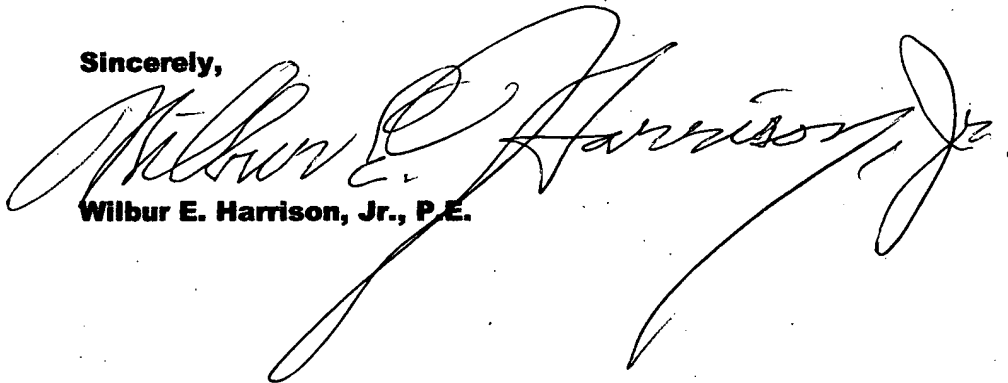
Initial Date: September 09, 2005 Revised Date: September 12, 2005

c. I hope this response clears up this matter without the need for more paperwork. However, if I must, I shall indeed submit a petition to revive for the reason of Unintentional Delay, which is stated in your AUG 30, 2005 letter shown in ATTACHMENT 1 to this letter. Please be respectfully advised that there is absolutely no way that I am going to give up on this Patent Application.

d. If there is anything further that I need to do to help to favorably resolve this situation please so advise in writing. Thank you.

e. I hereby respectfully request that my Patent Application be released for processing at the earliest convenience of the USPTO. Thank you.

Sincerely,

A large, stylized handwritten signature in black ink, reading "Wilbur E. Harrison, Jr." with a long, sweeping flourish extending from the bottom right.

Wilbur E. Harrison, Jr., P.E.

PTO/SB/05 (04-04)
Approved for use through 07/01/2006. OMB 0551-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Patent Reform Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new non-provisional applications under 37 CFR 1.301(c))

<p>APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i></p> <p>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing) Applicant claims small entity status. See 37 CFR 1.27</p> <p>2. <input checked="" type="checkbox"/> Specification (Total Pages <u>5</u>) Preferred arrangement set forth below: - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fee status under 37 CFR 1.27 - References to sequence listing, a claim, or a computer program listing appendix - Background of the invention - Brief Summary of the invention - Brief Description of the Drawings (if any) - Detailed Description - Claims - Abstract of the Disclosure</p> <p>3. <input checked="" type="checkbox"/> Drawings (35 U.S.C. 113) (Total Sheets <u>4</u>)</p> <p>4. Oath or Declaration (Total Sheets <u>2</u>) a. <input checked="" type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.53(d)) (For conventional individual with Box 10 completed) <input type="checkbox"/> DECLARATION OF INVENTORS: Signed statement attached reading inventors' names in the prior application; see 37 CFR 1.53(c)(2) and 1.53(d)</p> <p>5. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</p>	<p>ADDRESS TO: Commissioner for Patents P.O. Box 1480 Alexandria, VA 22313-1480</p> <p>6. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large source or computer program (Appendix) 7. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission (If applicable, at necessary) a. <input type="checkbox"/> Computer Readable Form (CRF) b. <input type="checkbox"/> Specification Sequence Listing on: 1. <input type="checkbox"/> CD-ROM or CD-R (2 copies), or 2. <input type="checkbox"/> Paper c. <input type="checkbox"/> Statements verifying identity of source codes</p> <p>ACCOMPANYING APPLICATION PARTS</p> <p>8. <input type="checkbox"/> Assignments Papers (cover sheet & documents) 9. <input type="checkbox"/> 37 CFR 3.72(c) Statement of Power of Attorney (when there is an assignment) 10. <input type="checkbox"/> English Translation Document (if applicable) 11. <input type="checkbox"/> Information Disclosure Statement (IDS) (PTO 1446) 12. <input type="checkbox"/> Preliminary Amendment 13. <input type="checkbox"/> Return Receipt Postcard (MPEP 608) (Should be specifically completed) 14. <input type="checkbox"/> Certified Copy of Priority Documents (if foreign priority is claimed) 15. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (EX/EXH). Applicant must attach form PTO/SB/25 or its equivalent. 16. <input type="checkbox"/> Other</p>
---	---

19. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No. 10/593,972

Prior application information: Examiner: Rimberly T. Wood Art Unit: 3632

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4a, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been involuntarily omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☐ Customer Number: OR ☒ Correspondence address below

Name	Wilbur E. Harrison, Jr.		
Address	225 Seward Road		
City	Baltimore	State	Maryland
Country	USA	Telephone	410-747-8325
		Zip Code	21228-5443
		Fax	410-747-2638

Name (Print/Type): Wilbur E. Harrison, Jr.	Registration No. (Attorney/Agent):	Date:	September 08, 2004
Signature: <i>Wilbur E. Harrison, Jr.</i>			

This collection of information is required by 37 CFR 4.81(b). The information is required to obtain or retain a benefit by the public which is in the field and by the USPTO to process an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.16. This collection is intended to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the extent of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1480, Alexandria, VA 22313-1480. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1480, Alexandria, VA 22313-1480.

If you need assistance in completing this form, call 1-800-PTO-0198 and select option 2.

FEE TRANSMITTAL for FY 2004

Effective 10/1/2003, Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$): **385.00**

Approved for use through 6/30/2006: GMS 0601-0002
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

Complete if Known

Application Number	
Filing Date	
First Named Inventor	
Examiner Name	
Art Unit	
Attorney Docket No.	

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number:
 Deposit Account Name:
 The Director is authorized to (check all that apply):
☒ Charge total indicated below ☐ Credit any overpayments
☒ Charge any additional fee(s) or any underpayment of fee(s)
☐ Charge fee(s) indicated below, except for the filing fee to the above identified deposit account.

FEE CALCULATION (continued)

3. ADDITIONAL FEES		Large Entity		Small Entity		Fee Description		Fee Paid	
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)
1051	130	2001	65			Surcharge - late filing fee or oath			
1052	50	2052	25			Surcharge - late provisional filing fee or oath sheet			
1053	130	1053	130			Non-English specification			
1512	2,520	1512	2,520			For filing a request for express examination			
1804	820	1804	320			Requesting publication of SR prior to Examiner action			
1805	1,540	1805	1,540			Requesting publication of SR when Examiner action			
1251	140	2251	65			Extension for reply within first month			
1252	420	2252	210			Extension for reply within second month			
1253	680	2253	475			Extension for reply within third month			
1254	1,480	2254	740			Extension for reply within fourth month			
1255	2,010	2255	1,005			Extension for reply within fifth month			
1401	330	2401	165			Notice of Appeal			
1452	330	2452	165			Filing a brief in support of an appeal			
1403	280	2403	140			Request for oral hearing			
1451	1,510	1451	1,510			Petition to institute a post-grant proceeding			
1452	110	2452	55			Petition to revoke - unreviewable			
1453	130	2453	65			Petition to revoke - unintentional			
1501	130	2501	65			Utility issue fee (for reissue)			
1502	480	2502	240			Design issue fee			
1503	640	2503	320			Plant issue fee			
1450	130	1450	130			Petitions to the Commissioner			
1807	50	1807	50			Processing fee under 37 CFR 1.17(c)			
1808	130	1808	130			Submission of Information Disclosure Sheet			
8021	40	8021	40			Recording each patent assignment per property (times number of properties)			
1803	770	2800	385			Filing a submission after final rejection (37 CFR 1.129(a))			
1510	770	2510	385			For each additional invention to be examined (37 CFR 1.126(a))			
1801	770	2801	385			Request for Continued Examination (RCE)			
1802	800	1802	800			Request for expedited examination of a design application			

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

1. BASIC FILING FEE		Large Entity		Small Entity		Fee Description		Fee Paid	
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)
1001	770	2001	385			Utility filing fee			
1002	340	2002	170			Design filing fee			
1003	530	2003	265			Plant filing fee			
1004	770	2004	385			Reissue filing fee			
1005	160	2005	80			Provisional filing fee			

SUBTOTAL (1) (\$): **385.00**

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE		Large Entity		Small Entity		Fee Description		Fee Paid	
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Code	Fee (\$)
1202	10	2202	5			Claims in excess of 20			
1201	20	2201	10			Independent claims in excess of 3			
1203	200	2203	100			Multiple dependent claims, if not paid			
1204	30	2204	15			Reissue independent claims over original patent			
1205	10	2205	5			Reissue claims in excess of 20 and over original patent			

SUBTOTAL (2) (\$): **150**

SUBMITTED BY: **William E. Hartzman** Registration No. **100-727-3325**
 Signature: **William E. Hartzman** Date: **06/07/04**

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PFD-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to be paid by the USPTO to process an application. Confidentiality is provided by 35 U.S.C. 422 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1480, Alexandria, VA 22315-1480. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1480, Alexandria, VA 22315-1480.

If you find difficulties in completing the form, call 1-800-PTO-1179 and select option 2.

PTO/SB/01 (04-03)
Approved for use through 02/11/2008, QMS 0091-0032
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Espionage Information Act of 1995, no person is permitted to transmit or a collection of information which contains a valid classification marking.

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.53)		Attorney Filing Number	
<input type="checkbox"/> Declaration Submitted with Issue Filing <input checked="" type="checkbox"/> Declaration Submitted after Issue Filing (exchange (37 CFR 1.53 (e) required)		First Named Inventor	
		COMPLETE IF KNOWN	
		Application Number	
		Filing Date	
		Art Unit	
		Examiner Name	

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Harrison Gyroscope-Stabilized Free Standing Towers And Missile Defense Systems

(Title of the Invention)

the specification of which:

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) [] as United States Application Number or PCT International Application Number [] and was amended on (MM/DD/YYYY) [] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identifying specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 366(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of this application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

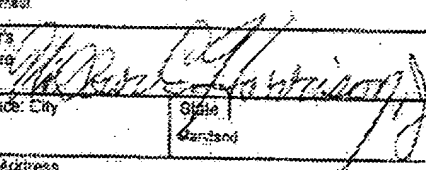
☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

(Page 1 of 2)

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.53. The information is required to obtain or retain a benefit by the USPTO to process an application. Confidentiality is provided by 35 U.S.C. 122 and 37 CFR 1.54. This collection is estimated to take 21 minutes to complete, including gathering, inspecting, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the burden of time you require to complete this form either suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEE OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9122 and select option 2.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input type="checkbox"/> Customer Number: <input type="text"/> OR <input checked="" type="checkbox"/> Correspondence address below			
Name Wilbur E. Harrison, Jr.			
Address 226 Stonewall Road			
City Baltimore	State Maryland	ZIP 21228-5443	
Country USA	Telephone 410-747-8325	Fax 410-747-8936	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.			
NAME OF SOLE OR FIRST INVENTOR: <input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle (if any)) Wilbur Ernest		Family Name or Surname Harrison	
Inventor's Signature 		Date September 8, 2004	
Residence: City Baltimore	State Maryland	Country USA	Citizenship USA
Mailing Address 226 Stonewall Road			
City Baltimore	State Maryland	ZIP 21228-5443	Country USA
NAME OF SECOND INVENTOR: <input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle (if any))		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
City	State	ZIP	Country
<input type="checkbox"/> Additional copies of a legal representative are being served on the <u>supplemental sheet(s) PTO/SB/02A or 02B.3 attached hereto.</u>			

UNITED STATES PATENT INVENTION APPLICATION

INVENTION: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr. 226 Stonewall Road, Baltimore, MD 21228-5443

Application Control No. 10/065,872

Correspondence Address:

Wilbur E. Harrison, Jr.
226 Stonewall Road
Baltimore, Maryland 21228-5443

Filed originally: Nov. 26, 2002. Date of this continuation-in-part: September 07, 2004.

Related U.S. Application Data

Continuation-in-part of Application Control no. 10/065,872.

Other Publications

Arnold, Ronald N., and Leonard Maunder, *Gyrodynamics and Its Engineering Applications*, New York and London: Academic Press, Inc., 1961.

Burger, W., and A. G. Corbet, *Ship Stabilizers, Their Design and Operation in Correcting the Rolling of Ships; A Handbook for Merchant Navy Officers*, London: Pergamon Press Ltd., 1966.

Crabtree, Harold, *An Elementary Treatment of the Theory of Spinning Tops and Gyroscopic Motion*, 3rd ed., New York: Chelsea Publishing Company, 1967.

Deimel, Richard F., *Mechanics of the Gyroscope*, New York: Deaver Publications, Inc., 1950.

Richardson, K. I. T., *The Gyroscope Applied*, London: Hutchinson's Scientific and Technical Publications, 1954.

Ross, James F. S., *The Gyroscopic Stabilization of Land Vehicles*, London: Edward Arnold & Co., 1933.

Scarborough, James B., *The Gyroscope, Theory and Applications*, New York and London: Interscience Publishers, 1958.

Schilovsky, P. P., *The Gyroscope: Its Practical Construction and Application*, New York: Chemical Publishing Corp. of N.Y., Inc., 1938.

www.mariner.connectfree.co.uk/html/gyro.htm Website about gyroscopes with diagrams and calculations.

ABSTRACT

Gyroscopes-stabilized free standing towers and missile defense systems are described that can support and contain surveillance radar, communication systems including electronic coordination systems and defensive weapon systems against cruise missiles, ICBMs, manned and unmanned aircraft, as well as other illegal penetration of USA borders. The current invention shall provide the lowest cost option for positioning systems where look-down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and high electrical power requirements are a major consideration and are a military requirement. Additionally, high electrical power generating capacity is included in this invention.

2 Claims, 4 Drawing Sheets

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.

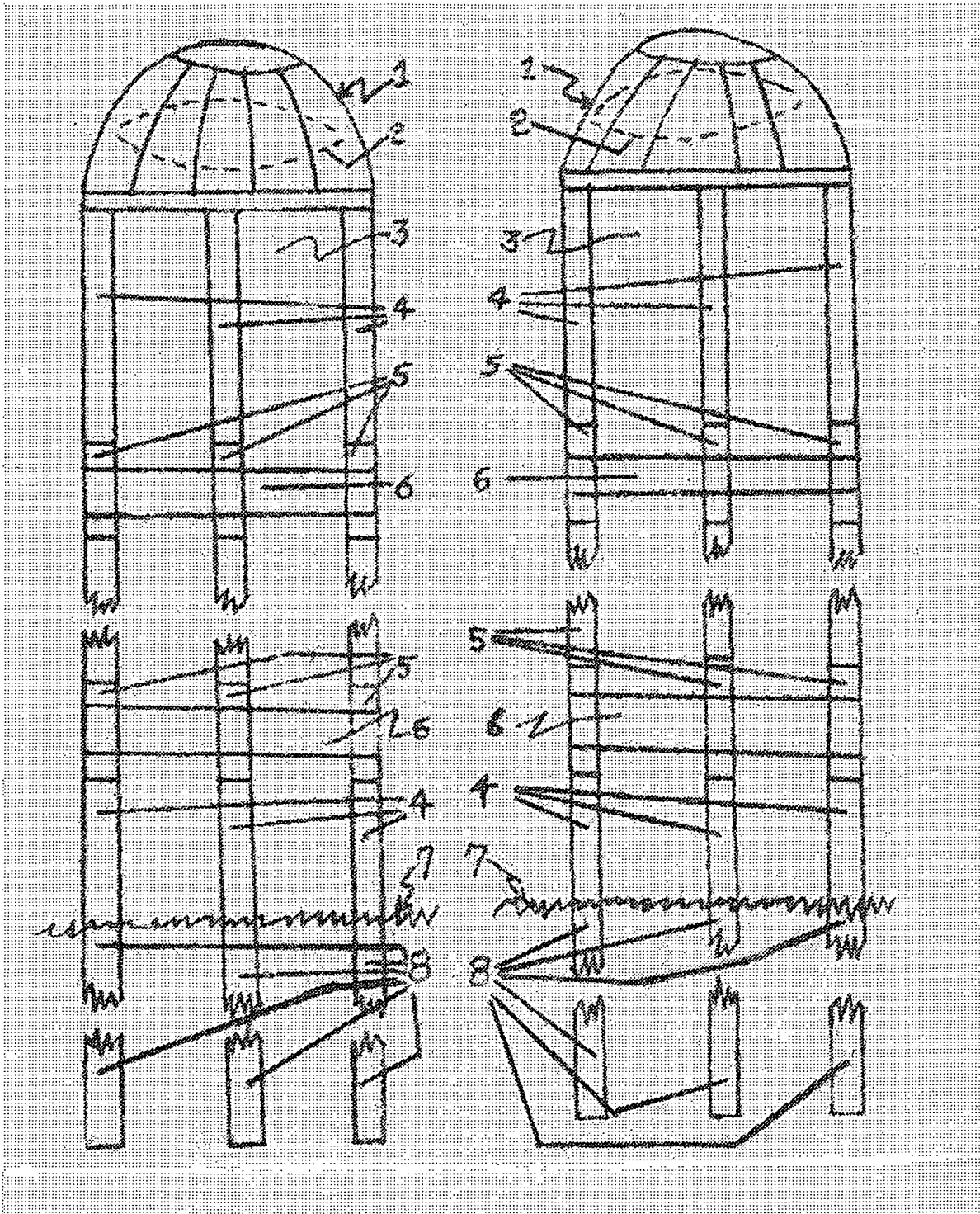


Figure 1

Scale: 1/16 Inch = 1.0 foot

Figure 2

Scale: 1/16 Inch = 1.0 foot

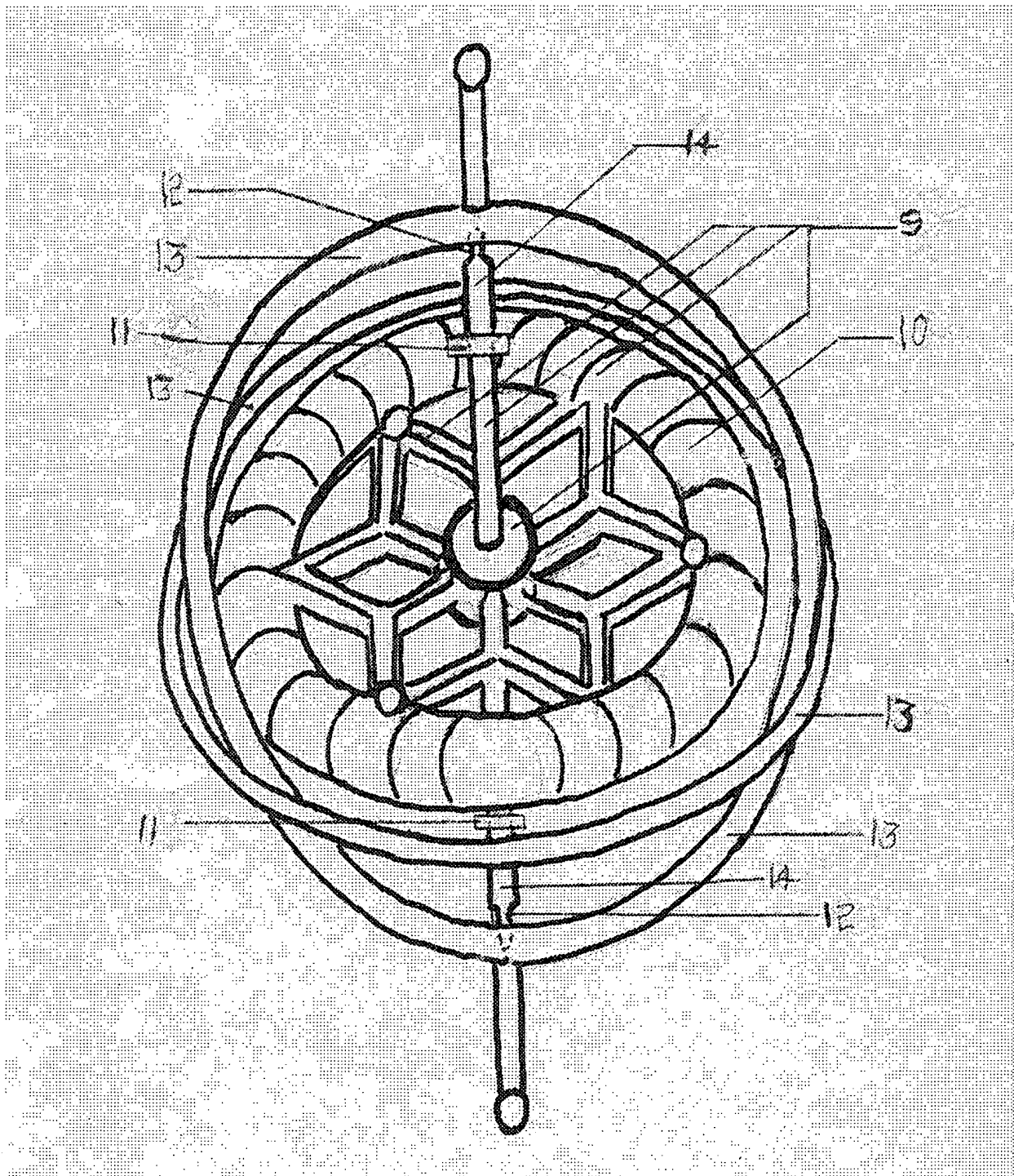


Figure 3
Scale: No Scale

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.



Figure 4
Scale: No Scale

U.S. Patent Application Sheet 4 of 4

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.



SOLAR HEATED AIR SUPPORTED STORAGE STRUCTURE (Diameter: 60 Feet)
Designed For: E.I. Du Pont De Nemours & Co., Inc. Wilmington, Delaware
*** Project Manager & Designer: Wilbur E. Harrison**

Figure 5
Scale: No Scale

Microsoft Word; File: 498422.doc; saved to: HD E, SCD-RW #1, CD-R #2 & FD #146

HARRISON GYROSCOPES-STABILIZED FREE STANDING TOWERS AND MISSILE DEFENSE SYSTEMS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to the use of multiple large heavy (10,000 to 24,000 pounds and heavier) gyroscopes used to balance and stabilize very high (1000 to 500,000 feet high) free-standing towers that do not require supporting cables or other structural means to provide balance and stability to the towers. The towers shall contain and support the following heavy items: military radar antennas, military radar equipment, military or other communications equipment, military or other electronic coordination systems equipment, military or other heavy electric power generating equipment including multiple heavy military defense equipment and measures. These military defense measure shall include, but shall not be limited to, the following: antimissile missiles, multiple DEW (directed energy weapons), multiple HEL (high energy laser) cannons, multiple HPCW (high power carrier wave) cannons and other DEW (directed energy weapons) and equipment needed to defend against unwanted and hostile terrorist or other enemy incursions by manned or unmanned aircraft, cruise missiles, ICBM's (Intercontinental Ballistic Missiles), or other unlawful incursions of USA borders, borders of USA allies, deployed overseas, or otherwise deployed, armed forces of the USA and USA allies and other border defenses. Presently, the USA does not have adequate defenses against low flying and radar evading Cruise Missiles, ICBMS and other intrusions of USA borders. The current invention shall correct this problem by providing the lowest cost option for positioning defensive systems where look down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and very high electric power requirements are a major consideration, an important military advantage and a major military requirement.

2. Description of the Prior Art

There is no Prior Art to the best of the knowledge of this inventor. The use of very large and heavy gyroscopes (10,000 to 2400 pounds and heavier) to balance and stabilize very high (1000 feet tall to 500,000 feet tall) free standing towers, wherein the towers thereby do not require the use of cables or other structural means to provide balance and stability to the towers is not covered in the prior art. Such cables or other structural supports for very high towers have been required in the past, and are still required even now. These very high towers contain and support the following heavy equipment as follows: heavy military surveillance radar antennas, heavy military surveillance radars, heavy military and other communications equipment and military coordination systems and equipment, as well as multiple military defense weapons and systems required to defend against multiple enemy manned or unmanned aircraft, multiple cruise missile attacks, multiple ICBMs (intercontinental ballistic missiles) attacks and other violations of USA borders. Military defense weapons include anti missile missiles, directed energy weapons such as, but are not limited to, the following: HEL (high energy lasers), HPCW (high power carrier waves) and the use of USA modern defense aircraft and their missile attack equipment. The current invention also provides the lowest cost option for positioning defensive systems where look-down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration, an important military advantage and a major military requirement. Thus, this application is not included in the public domain.

SUMMARY OF THE INVENTION

In view of the technical state of the USA not being prepared for the present border and air defenses of the USA, as described above in 1. Field of the Invention, the objective of the present invention is offered to correct this serious problem. Accordingly, the current invention, which shall be described subsequently in greater detail, is offered.

To attain the above objective, representative embodiments of the concepts of the present invention are illustrated in the drawings Fig. 1, Fig 2, Fig 3 and Fig. 4.

The present invention consists of gyroscopes-stabilized free standing towers that do not require the use of cables or other structural means to provide balance and stability to the towers. These towers support and contain large radar antennas, radar equipment, communications equipment, electronic coordination systems, electric power generating equipment and multiple defense measures and equipment needed to defend the USA, USA deployed armed forces and USA Allies against hostile terrorist or other enemy incursions by manned aircraft or unmanned aircraft, cruise missiles, ICBMs as well as other types of illegal USA border violations. The current invention thus provides the lowest cost option for positioning defensive systems where look-down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration, an important military advantage and a major military requirement. The present invention provides a near perfect long-range defense against military terrorist threats.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. 1 is a perspective front view of the current invention according to the first embodiment of the present invention.

Fig. 2 is a perspective side view of the current invention according to the first embodiment of the present invention.

FIG. 3 is a perspective view illustrating the major gyroscope working components.

Fig. 4 is a perspective view illustrating a large air supported cable reinforced structure.

Fig. 5 is a perspective view illustrating a smaller air supported structure that does not require cable reinforcement.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to FIG. 1 thereof, the following will be described:

FIG 1: More specifically, it will be noted that the first embodiment of FIG. 1 includes a perspective drawing of the front view of the current invention. FIG. 1 shows the following: 1 the cable reinforced air supported structure that serves as weather protection for the 2 radar antenna. Also 1 may contain the surveillance radar equipment, communications equipment and other related equipment as required. 3. The location of the laser cannon (and other ordinance equipment and other devices required as armament measures required to defend against incoming detected missiles and other threats. 4 the structural clamps as required to support the large heavy gyroscopes onto the towers are so indicated. 5 the structural clamps required to support the large heavy gyroscopes onto the towers. 6 the large heavy gyroscopes assemblies are schematically shown. The typical inner working components of the gyroscopes, which are the most critical and necessary components of the towers are shown schematically in FIG. 3 and described below. To continue with regard to FIG. 1, the ground level or water level 7 is shown schematically. It is noted that the towers may be built on the ground or on the water, which allows the towers to be built at sea off shores, in rivers, in lakes, in bays and other bodies of water. 8 the tower foundations shall usually be steel reinforced concrete pilings, or other pilings, driven down to ground rock. The tower foundations may also be other suitable foundations as dictated by local conditions. However, it is emphasized here that the tower foundations are normally driven down to ground rock in order to provide the towers with solid foundations.

Fig. 2 is a perspective drawing of the side view of the current invention. FIG. 2 shows the following: 1 the cable reinforced air supported structure that serves as weather protection for the 2 radar antenna. Also 1 may contain the surveillance radar equipment, communications equipment and other related equipment as required. 3. The location of the laser cannon (and other ordinance equipment and other devices required as armament measures required to defend against incoming detected missiles and other threats. 4 the structural clamps as required to support the large heavy gyroscopes onto the towers are so indicated. 5 the structural clamps required to support the large heavy gyroscopes onto the towers. 6 the large heavy gyroscopes assemblies are schematically shown. The typical inner working components of the gyroscopes, which are the most critical and necessary components of the towers are shown schematically in FIG. 3 and described below. To continue with regard to FIG. 2, the ground level or water level 7 is shown schematically. It is noted that the towers may be built on the ground or on the water, which allows the towers to be built at sea off shores, in rivers, in lakes, in bays and other bodies of water. 8 the tower foundations shall usually be steel reinforced concrete pilings, or other pilings, driven down to ground rock. The tower foundations may also be other suitable foundations as dictated by local conditions. However, it is emphasized here that the tower foundations are normally driven down to ground rock in order to provide the towers with solid foundations.

FIG. 3 denotes a perspective drawing of a gyroscope, and shows the components of a gyroscope. 9 denotes the gyroscope rotor which is the main gyroscope component that spins in the 13 gyroscope frame. The high speed spinning of the gyroscope rotor imparts the necessary high gyroscopic moment to the gyroscope. The high gyroscopic moment of the gyroscope provides the required balance and stability to the towers. 10 the rotor outer perimeter contains the maximum weight of the rotor, which imparts the maximum stabilizing gyroscopic moment to the gyroscope. The amount of weight placed in the 10 rotor perimeter is dependent upon fabrication techniques, the tensile strength of the rotor materials and other factors. 12 the thrust bearings serve to retain the 9 and 10 gyroscope rotor structurally and properly attached to the 13 gyroscope frame. The 12 magnetic thrust bearings are electronically controlled. This

provides electronic control of such factors as unwanted vibration and other unwanted factors by the use of electronic damping. 11 the radial bearings of the 9 and 10 gyroscope rotor. 11 the radial bearings are connected to the 13 gyroscope frame but do not rotate with the 9 and 10 rotor or the 14 rotor shaft. 11 the magnetic radial bearings are electronically controlled. This provides electronic control of such factors as unwanted vibration and other unwanted factors by the use of electronic damping. 14 the rotor shaft is normally steel, or another suitable magnetic material, as required for the proper functioning of the magnetic thrust bearings and the magnetic radial bearings to perform. This maximizes rotor spin life by eliminating all metal-to-metal wearing contact between the spinning rotor 11 and 12, the 14 steel gyroscope shaft and 13 the gyroscope frame by controlling and restricting the location of the 14 rotor shaft using powerful magnetic flux, provided by powerful electro-magnets, rather than by the more well known means of metal to metal bearings which introduces metal-to-metal wearing contact accompanied by friction drag. This use of 12 magnetic thrust bearings and 11 magnetic radial bearings extends the expected maintenance free life of the gyroscopes to an estimated 200 years, providing there is no interruption of electric power to the magnetic bearings. Note: significant and large electric power is being continually generated by the towers themselves.

Fig. 4 denotes a perspective drawing of an air supported and cable-reinforced 200 foot in diameter air supported structure showing the reinforcing cables at intervals of approximately every 30 feet of the perimeter of the structure that is constructed of 5 mil thick Mylar polyester film. Air supported structures are normally built in the form of a hemisphere, but are also built in the shape of a Quonset structure to cover rectangular areas, such as swimming pools. All air supported structures are firmly supported by air that is maintained at a slightly higher pressure, of 5 psf higher than the air outside the air supported structure. This pressure differential is maintained electronically. Reinforcing cables are used to enable air supported structures to withstand very high wind conditions and other severe weather conditions. Each of the reinforcing cables are firmly and structurally attached to the ground or to the platform supporting the air supported structure. In Figure 4, at the lower right of the structure there is an air lock to enable entrance into the structure by trucks delivering building materials for the building being constructed inside the air supported structure with a minimal or no reduction of the air pressure inside the structure. Air supported structures are made of flexible films or materials such as, but not limited to, the following: Mylar polyester film a clear transparent DuPont product with a very high tensile strength of 25,000 psi that approaches the tensile strength of steel. Mylar is a long chain polymer composed of a cast film of polyethylene terephthalate that is orientated by being stretched in both the transverse direction and the longitudinal directions during it's manufacture; this process causes the molecules of the film to link, forming the long chains that contribute to the strength and other properties of the film. Other materials used for air supported structures include various vinyl films, hypalon coated nylon cloth, vinyl coated nylon cloth, Dacron and other cloths coated or not coated. Air supported structures are light weight, low cost structures normally used for the storage of materials and other uses.

Fig. 5 is an actual picture of a 60 foot diameter hemispheric shaped air supported structure, made of 5 mil thick Mylar polyester film, that does not require the use of reinforcement cables for stability in winds of 60 miles per hour to 100 miles per hour.

SPECIFICATION

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Detailed Description: The present invention relates to the use of multiple large and heavy (10,000 pounds to 24,000 pounds and heavier) gyroscopes that provide balance and stabilization to very high (1000 feet to 500,000 feet high) free-standing towers that thereby do not require use of supporting cables or other structural means to provide balance and stability to the towers. These gyroscopes-stabilized free standing towers support and contain anti-missile defense radar, communications systems and defensive weapons to protect the USA and it's Allies against enemy cruise missiles, ICBMs and manned or unmanned aircraft and other unwanted or unlawful USA border penetrations. The above towers also provide border defense for the USA and USA Allies and deployed USA and USA Allies armed forces. Defensive weapons on or connected by communication systems to the towers would include, but shall not be limited to, anti-missile missiles, USA defensive aircraft, Directed Energy Weapons (but would not be limited to) DEW (directed energy weapons) such as HEL (High Energy Laser) weapons and HECW (High Energy Carrier Wave) weapons. The system described above would provide the lowest cost option for positioning defensive systems where look down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements, required to power the defensive weapons and other uses, are a major military consideration and are a military requirement. The design technique would include:

1. The use of very large and heavy (10,000 pounds to 24,000 pounds, and much higher) gyroscopes with very large gyroscopic moments to provide high tower balance and stability. The towers so balanced and stabilized shall therefore not require the use of structural cables or other stabilizing structures to provide tower balance and tower stability.
2. The gyroscopes described in 1 above shall be firmly secured to the towers every 100 feet; the axis of rotation of the gyroscope rotors shall be identical to the vertical center line of the tower. The gyroscopes shall weigh some 10,000 pounds to 24,000 pounds, or higher, with most gyroscope rotor weight concentrated at the perimeter of the gyroscope, and the rotor of the gyroscopes shall be rotating at the highest speed that the strength of the material from which the gyroscopes rotors are constructed will allow and still not fly apart, which shall be 2,500 RPM to 15,000 RPM, or higher, if the strength or other properties of the material from which the gyroscope rotors are made will permit. Further, the rotor thrust bearings and radial bearings shall be the best available, of metal or other material or materials, to promote the maximum effective lifetime of the gyroscopes. Accordingly, the thrust bearings and radial bearings shall be magnetic bearings, which shall contain the rotors of the gyroscopes in a magnetic flux, thereby eliminating all metal-to-metal wearing contact of the gyroscope rotors, which are the major moving part in the gyroscopes. This shall prolong the maintenance free lifetime of the gyroscopes to an estimated 200 years, provided that electric power to the gyroscopes is not interrupted. Note that electric power is continually generated by the towers themselves. The gyroscopes shall be contained in hermetically sealed containers to improve their lifetime..
3. The tower vertical structural supporting legs shall be round, square, rectangular or any other shape in cross-section; shall be made of a clear material such as Lucite, or any other suitable material; and shall contain or support photo-electric panels for the purpose of generating electric power. There shall be at least one structural supporting leg or many more structural supporting legs as required by structural requirements or electric power requirements. Note that the structural legs shown in Figure 1 and Figure 2 show six (6) structural tower legs. More structural legs shall be used as and if required structurally or as required for electric power generation purposes.
4. The towers shall have wind power electric power generators attached as often as is practical. Our plan is to attach such wind power generators every 50 feet of tower height.
5. Radar antenna shall be attached at the top of the towers, and every 1000 feet of tower height. The antenna and associated equipment shall be weather protected via an air-supported cable-reinforced structure or by other means.
6. A special pressurized elevator shall be attached to each tower to enable access to the radar antenna, radar equipment and other servicing as needed.

CLAIMS

1. Very tall towers that are 1000 feet tall to 500,000 feet tall, and higher, that contain large heavy gyroscopes every 100 feet of tower height that weigh 10,000 pounds to 24,000 pounds, or even heavier, to balance and stabilize the towers, thus negating the need to use cables or other structures to provide balance and stability for the towers, the system comprising:

(a) the towers shall contain and support multiple surveillance radar equipments, multiple radar antennas, both military or commercial communications equipments, defense coordination equipments and defensive weapon systems to defend the USA and USA allies against cruise missiles, ICBM's, manned or unmanned aircraft, as well as to defend against all hostile, harmful, unlawful or unwanted violations of USA borders;

(b) the use of clear or other structural members (such as Lucite, steel, carbon composite fiber or other materials) suitable to contain, or support, photoelectric power panels for the purpose of generating significant electric power;

(c) the use of wind power electric generators attached every 50 feet of tower height, either more or less, on the high free-standing towers for generating significant electric power; and

(d) the use of special pressurized elevators to construct, service and maintain the high 1000 feet high to 500,000 feet high, and higher, free-standing military, communication and commercial towers.

2. The use of the current invention as a primary source for generating electric power which is both non-polluting to the environment and renewable; such electricity shall be herein afterwards referred to as green electric power; green electric power generation does not pollute the air, the earth, or any other aspect of our environment, as does electricity generated using such fuels as petroleum, coal, natural gas, nuclear fuel and all other such non-renewable fuels that shall eventually be depleted, the system comprising;

(a) wind power electrical power generators placed every 50 feet or more of tower height; and

(b) photoelectric power panels inside of, or attached to, the tower structural legs.

3. The system of claim 2, at heights of 50,000 feet to 100,000 feet or higher, generating the equivalent of the electric power generated by a conventional power plant fueled by coal, petroleum, natural gas or nuclear fuel and at an estimated cost of 25% to 10% of the cost of generating electricity using conventional fuels.

4. The system of claim 2 further using green electric power to aerate the streams, rivers, bays and virtually all other waterways, which are now dangerously polluted, are actually expiring, and are technically and literally in the process of becoming barren of underwater life, due primarily to the lack of dissolved oxygen, caused by human pollution from storm water run-off, improperly designed and improperly managed waste water treatment plants, and the improper and excessive use of chemical fertilizer needed to produce food for humans.

5. The system of claim 2 further using the wide-spread generation and use of this green electric power to reduce the USA's existing dependency upon foreign oil sources.

6. The system of claim 2, if cost-shared with claim 1, would further reduce the cost of green electric power, and thus would escalate the importance of claim 2's feature of the gyroscopes-stabilized free-standing towers.

Microsoft Word; File: 498421.doc; Saved to, HD E, CD-RW #2, CD-R #2 & FD #147.

Combined Above Files into Microsoft Word; File: 498430.doc Saved to HD E, CD-RW #2 & CD-R #2.

ATTACHMENT 4

FACSIMILE TRANSMISSION COVER SHEET

Date: February 10, 2005

**TO: Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Telephone: (703) 308-1202**

Reference: Your enclosed Office communication, copy marked Attachment A, dated 03/03/2005 re. my CIP for Application No. 10/065,872. Also enclosed, marked Attachment B, is a copy of my CIP as duly and timely submitted.

**FROM: Wilbur E. Harrison, Jr.
FAX: (321) 253-8961
TELEPHONE: (321) 752-5489; Cellular: (321) 652-9676.
LOCATION: 1581 Perdido Court
Melbourne, Florida 32930-6226**

SUBJECT: The Reference Office Communication was a Notice of missing filing fee and late oath.

COMMENTS:

1. The subject notice was sent to my incorrect address. My new permanent address has been duly and timely submitted. Please see my Attachment B.
2. My CIP for Application No. 10/065,872 was duly and timely submitted. Please see Attachment B for a copy.
3. As references please contact the following:

____ **Ms. Kimberly T. Wood, USPTO Patent Examiner, Art Unit 3632
Fax: (703) 308-0539
Telephone: (703) 308-0539**

In a telephone call to me from Ms. Wood on 02/21/05, Ms. Wood confirmed receipt of my CIP re. Application Number 10/065,872 in a timely manner. At that time, I assured Ms. Wood that I had not abandoned the Referenced Patent Application. During our conversation Ms. Wood mentioned that Ms. Doshie Day of the USPTO, Office of Initial Patent Examination, Fax: (703) 305-9932; Telephone: (703) 308-3640, had clarified my file in the USPTO computer to be in good order and timely submitted.

____ **Ms. Doshie Day, USPTO Office of Initial Patent Application
Fax: (703) 305-9822
Telephone: (703) 308-3640**

I received a telephone call from Ms. Day on 12/27/04. Ms. Day stated that she had clarified my file in the USPTO computer and that my file was in good order and was timely submitted.

4. As I recall, I was in-process of a permanent move here to Florida at that time; and there were 4 hurricanes here. This may have been a cause of some confusion.

Thank you for your cooperation.

Sincerely,

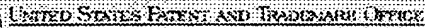
Wilbur E. Harrison

NUMBER OF PAGES INCLUDING COVER: 26

Microsoft Word; File: 4984124.doc; saved in H.D.E, CD-RW #2, CD-R #2 & FD 145.

CC: Ms. Kimberly T. Wood

CC: Ms. Doshie Day



UNITED STATES DEPARTMENT OF COMMERCE
Marine Service Bureau and Headquarters INTL
address: 1000 PENNSYLVANIA AVE. N.W.
Rm. 600, 1st Fl.
Washington, D.C. 20540
6060600000

APPLICATION NUMBER	FILED IN THIS DATE	FIRST NAME OF APPLICANT	ATTORNEY IF KNOWN
16-031-297	06/3/2014	William Ernest Harrison	

Walter E. Harrison, Jr.
226 Stonewall Road
Baltimore, MD 21228-5443

CONFIRMATION NO. S442

FORMALITIES LETTER



60030000: 223377

Date Mailed: 03/03/2005

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 12/22/2004 to the Notice to File Missing Parts (Notice) mailed 1/12/2004 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice:

The period of reply remains as set forth in the Notice. You may, however, obtain **EXTENSIONS OF TIME** under the provisions of 37 CFR 1.135 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application. Replies should be mailed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

- The statutory basic filing fee is missing.
Applicant must submit \$ 395 to complete the basic filing fee for a small entity.
- Late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(b) of \$95 was not received

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$460 for a Small Entity

- \$395 Statutory basic filing fee
- \$65 Late oath or declaration Surcharge

Replies should be mailed to: **Mail Stop Missing Parts**
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

A copy of this notice MUST be returned with the reply.

S. [Signature]
Customer Service Center
Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

[illegible]

PTO-5817 (1-1999)
Approved for use through 07/31/2008. OMB 3523-0046
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
This form is subject to the provisions of 37 CFR 1.122 and 37 CFR 1.123.

FEE TRANSMITTAL for FY 2004

Effective 10/1/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT: **\$ 385.00**

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account: _____

☐ Debit Account: _____

The Director is authorized to (check all that apply):

☐ Charge fees indicated below ☐ Credit any overpayments

☐ Charge any additional fees, or any underpayment of fees

☐ Charge fees indicated below, except for the filing fee to the above identified applicant.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 180	2003 90	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 180	2005 90	Provisional filing fee	
SUBTOTAL (1)			\$ 385.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1201 15	2201 7.5	Claims in excess of 20	
1202 85	2202 42.5	Independent claims in excess of 5	
1203 250	2203 125	Multiple dependent claims (if not paid)	
1204 95	2204 47.5	Rescued independent claims over original claims	
1205 15	2205 7.5	Rescued claims in excess of 20 and over original claims	
SUBTOTAL (2)			\$ 0

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 120	2051 60	Surcharge - late filing fee or oath	
1052 30	2052 15	Surcharge - late provisional filing fee or non-provisional	
1053 130	2053 65	Non-English translation	
1811 2,520	1812 1,260	For filing a request for an appeal	
1804 820	1805 410	Requesting publication of the prior art	
1810 1,660	1806 830	Requesting publication of the prior art	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,240	2254 620	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 310	2401 155	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,010	2451 505	Patent to institute a public use proceeding	
1452 110	2452 55	Patent to institute a public use proceeding	
1453 1,320	2453 660	Patent to institute a public use proceeding	
1501 1,830	2501 915	Utility reissue fee for obvious	
1502 450	2502 225	Design reissue fee	
1503 940	2503 470	Plant reissue fee	
1504 130	2504 65	Reissues in the Continuation	
1507 50	2507 25	Processing fee under 37 CFR 1.17(c)	
1508 180	2508 90	Submission of Information Disclosure Sheet	
1509 40	2509 20	Requesting each patent description per property (lines number of properties)	
1510 770	2510 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1511 770	2511 385	For each additional submission to be examined (37 CFR 1.129(b))	
1512 720	2512 360	Request for Continued Examination (RCE)	
1513 900	2513 450	Request for supra-conducted examination of a design application	
SUBTOTAL (3)			\$ 0

Other fee (specify): _____

Subtotal by Bank Fee Paid: _____

Submitted by: WILLIAM E. HARRISON, JR. Registration No. _____

Signature: William E. Harrison, Jr. Date: 09/07/04

Telephone: 410-747-8325

Warning: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-5817.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to the benefit of the USPTO to process an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is subjected to the 12 minutes to complete the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1480, Alexandria, VA 22312-1480. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1480, Alexandria, VA 22312-1480.

If you need assistance in completing this form, call 1-800-PTO-7150 and select option 2.

PTOGB/01 (08-03)
Approved for use through 4/31/2008. FORM 0051 0330
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Patentmark Reduction Act of 1992, no person shall be required to respond to a collection of information unless it carries a valid OMB control number.

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

<input type="checkbox"/> Declaration Submitted With Initial Filing	OR	<input checked="" type="checkbox"/> Declaration Submitted after initial Filing (surcharge 37 CFR 1.63(a) (required))
--	----	--

Attorney Docket Number	
First named inventor	
COMPLETE IF KNOWN	
Application Number	
Filing Date	
Art Unit	
Examiner Name	

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Harrison Gyroscope-Stabilized Free Standing Towers And Missile Defense Systems

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) as United States Application Number or PCT International Application Number

Application Number: 10602 072 and was amended on (MM/DD/YYYY) (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.55, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (e), or 365(a) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking this box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTOGB/02b attached hereto.

(Page 1 of 2)

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to be (and by the USPTO is provided) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. The collection is intended to take 25 minutes to complete, including gathering, preparing, and entering the completed application form in the USPTO. Time will vary depending upon the individual case. Any comments on the impact of this form on your business should be sent to the Office of Management and Enterprise Services, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22315-1450. DO NOT SEND PAPER OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22315-1450.

If you need assistance in completing the form, call 1-800-PTO-R-100 and select option 2.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input type="checkbox"/> Customer Number <input type="text"/> OR <input checked="" type="checkbox"/> Correspondence address below			
Name: Wilbur C. Harrison, Jr.			
Address: 226 Stonewall Road			
City: Baltimore		State: Maryland	ZIP: 21226-5443
Country: USA	Telephone: 410-747-3325	Fax: 410-747-5933	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued hereon.			
NAME OF SOLE OR FIRST INVENTOR: <input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any]): Wilbur Emerson		Family Name or Surname: Harrison	
Inventor's Signature: 		Date: September 8, 2004	
Residence: City: Baltimore	State: Maryland	Country: USA	Citizenship: USA
Mailing Address: 226 Stonewall Road			
City: Baltimore	State: Maryland	ZIP: 21226-5443	Country: USA
NAME OF SECOND INVENTOR: <input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any]):		Family Name or Surname:	
Inventor's Signature:		Date:	
Residence: City:	State:	Country:	Citizenship:
Mailing Address:			
City:	State:	ZIP:	Country:
<input type="checkbox"/> Additional inventors or a legal representative are being named on the _____ (supplemental sheet(s) PTO/SB-02A or 02A-R attached hereto).			

United States Patent and Trademark Office
Credit Card Payment Form
Please Read Instructions before Completing this Form

Credit Card Information			
Credit Card Type: <input checked="" type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> American Express <input type="checkbox"/> Discover			
Credit Card Account #: 4417 1221 6938 4945			
Credit Card Expiration Date: 11/05			
Name as it Appears on Credit Card: Wilbur B. Harrison			
Payment Amount \$ (US Dollars): 355.00			
Cardholder Signature: <i>Wilbur B. Harrison</i>		Date: September 9, 2004	
<small>Refund Policy: The Office may refund a fee paid by customer or in excess of what is permitted. A change of purpose after the payment of a fee will not entitle a party to a refund of such fee. The Office will not refund amounts of \$25.00 or less unless a refund is specifically requested, and will not notify the payer of such amounts (37 CFR § 1.201). Refund of a fee paid by credit card will be issued as a credit to the credit card account to which the fee was charged.</small>			
<small>Service Charge: There is a \$50.00 service charge for processing each payment refused (returning a check returned "unpaid") or charged back by a financial institution (37 CFR § 1.21 (m)).</small>			
Credit Card Billing Address			
Street Address 1: 200 Stonewall Road			
Street Address 2:			
City: Baltimore			
State/Province: Maryland		Zip/Postal Code: 21226-5413	
Country: USA			
Daytime Phone #: 410-747-6326		Fax #: 410-747-9936	
Request and Payment Information			
Description of Request and Payment Information:			
Basic Filing Fee for a CIP (continuation in part):			
<input checked="" type="checkbox"/> Patent Fee	<input type="checkbox"/> Patent Maintenance Fee	<input type="checkbox"/> Trademark Fee	<input type="checkbox"/> Other Fee
Application No. 10/065,373	Application No.	Application No.	EXON Customer No.
Patent No.	Patent No.	Registration No.	
Attorney Docket No.		Identify or Describe Mark	

If the cardholder includes a credit card number on any form or document other than the Credit Card Payment Form, the United States Patent and Trademark Office will not be liable in the event that the credit card number becomes public knowledge.

UNITED STATES PATENT INVENTION APPLICATION

INVENTION: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr. 226 Stonewall Road, Baltimore, MD 21228-5443

Application Control No. 10/065,872

Correspondence Address:

Wilbur E. Harrison, Jr.

226 Stonewall Road

Baltimore, Maryland 21228-5443

Filed originally: Nov. 26, 2002. Date of this continuation-in-part: September 07, 2004.

Related U.S. Application Data

Continuation-in-part of Application Control no. 10/065,872.

Other Publications

Arnold, Ronald N., and Leonard Maunder, *Gyrodynamics and Its Engineering Applications*,

New York and London: Academic Press, Inc., 1961.

Burger, W., and A. G. Corbet, *Ship Stabilizers, Their Design and Operation in Correcting the Rolling of Ships; A Handbook for Merchant Navy Officers*, London: Pergamon Press Ltd., 1966.

Crabtree, Harold, *An Elementary Treatment of the Theory of Spinning Tops and Gyroscopic Motion*, 3rd ed., New York: Chelsea Publishing Company, 1967.

Deimel, Richard F., *Mechanics of the Gyroscope*, New York: Deaver Publications, Inc., 1950.

Richardson, K. I. T., *The Gyroscope Applied*, London: Hutchinson's Scientific and Technical Publications, 1954.

Ross, James F. S., *The Gyroscopic Stabilization of Land Vehicles*, London: Edward Arnold & Co., 1933.

Scarborough, James B., *The Gyroscope, Theory and Applications*, New York and London: Interscience Publishers, 1958.

Schilovsky, P. P., *The Gyroscope: Its Practical Construction and Application*, New York: Chemical Publishing Corp. of N.Y., Inc., 1938.

www.mariner.connectfree.co.uk/html/gyro.htm Website about gyroscopes with diagrams and calculations.

ABSTRACT

Gyroscopes-stabilized free standing towers and missile defense systems are described that can support and contain surveillance radar, communication systems including electronic coordination systems and defensive weapon systems against cruise missiles, ICBMs, manned and unmanned aircraft, as well as other illegal penetration of USA borders. The current invention shall provide the lowest cost option for positioning systems where look-down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and high electrical power requirements are a major consideration and are a military requirement. Additionally, high electrical power generating capacity is included in this invention.

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.

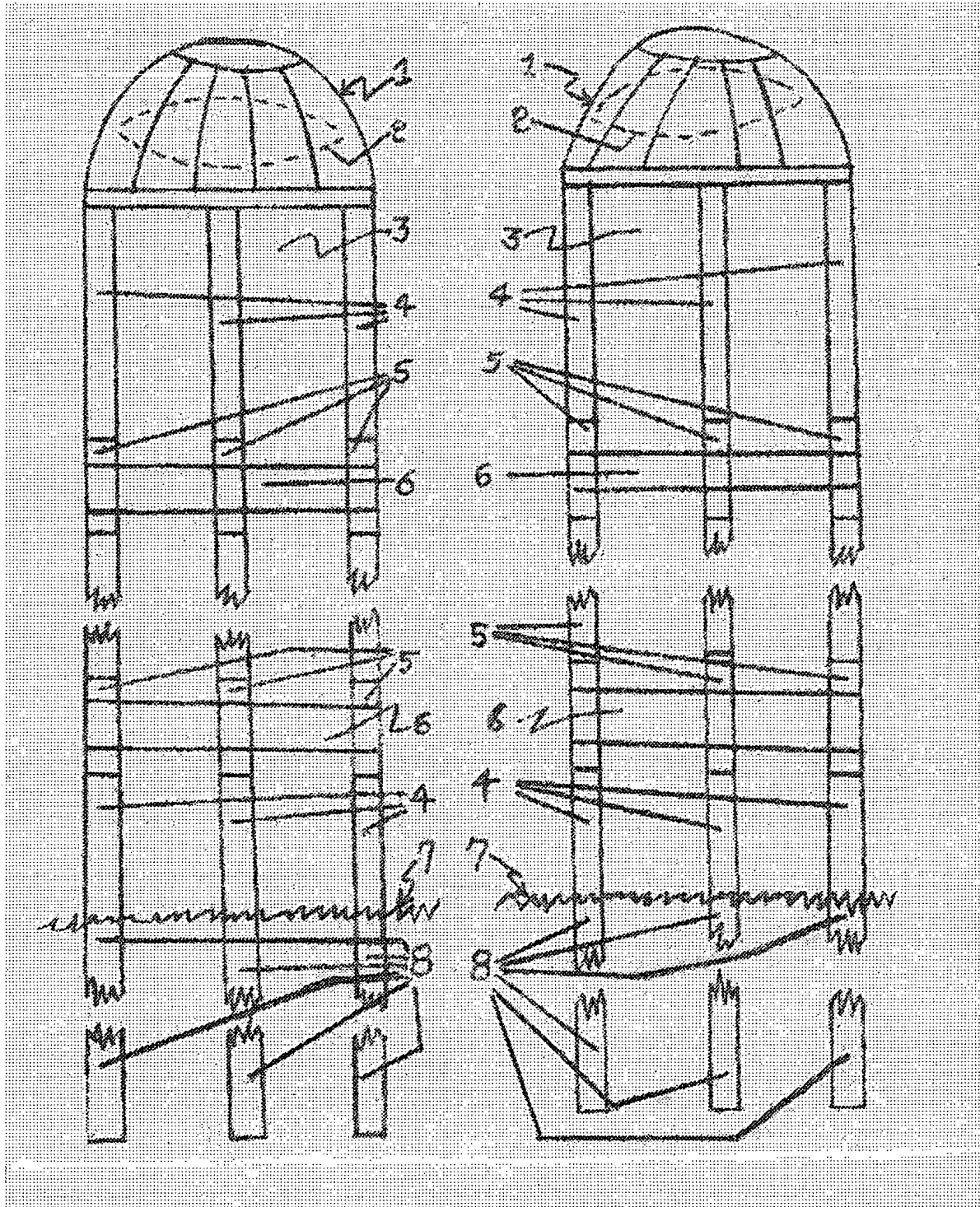


Figure 1
Scale: 1/16 Inch = 1.0 foot

Figure 2
Scale: 1/16 Inch = 1.0 foot

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.

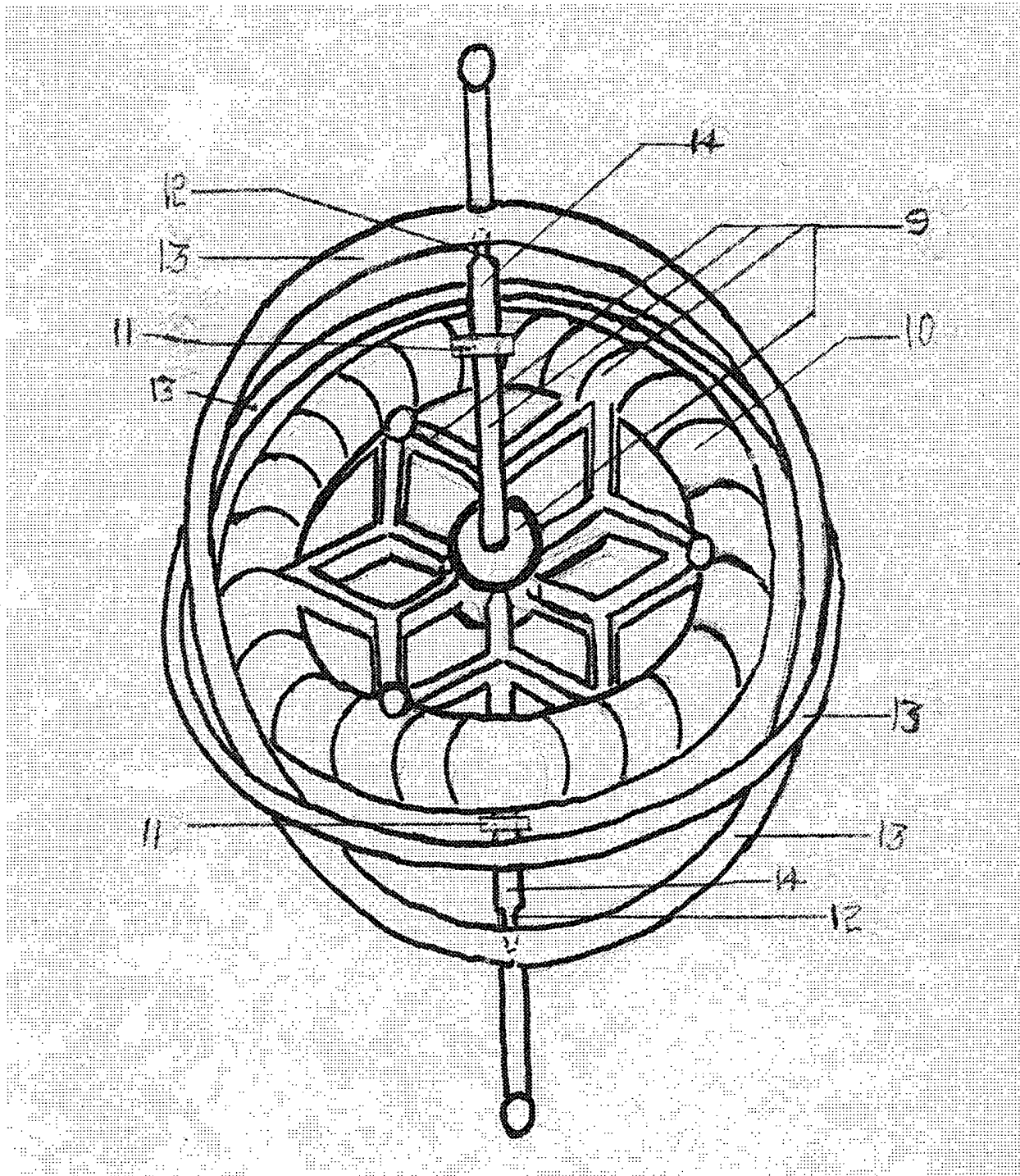
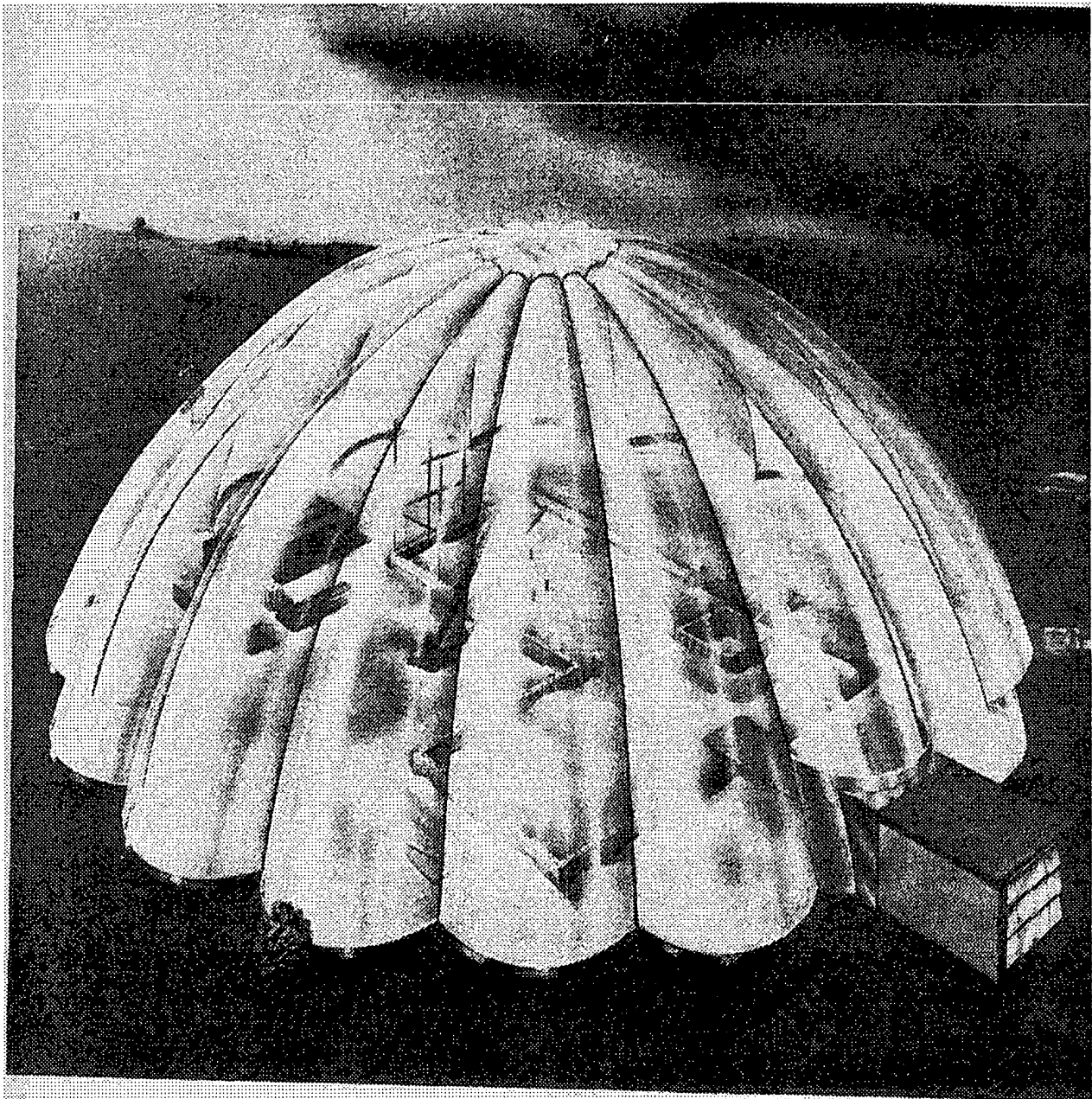


Figure 3
Scale: No Scale

U.S. Patent Application Sheet 3 of 4

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.



SOLAR HEATED AIR SUPPORTED STRUCTURE (DIAMETER: 200 FEET)
DESIGNED FOR: E. I. DU PONT DE NEMOURS & CO., INC.
WILMINGTON, DELAWARE
* PROJECT MANAGER & DESIGNER: WILBUR E. HARRISON

Figure 4
Scale: No Scale

U.S. Patent Application Sheet 4 of 4

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.



SOLAR HEATED AIR SUPPORTED STORAGE STRUCTURE (Diameter: 60 Feet)

Designed For: E.I. Du Pont De Nemours & Co., Inc. Wilmington, Delaware

* Project Manager & Designer: Wilbur E. Harrison

Figure 5

Scale: No Scale

Microsoft Word; File: 498422.doc; saved to: HD E, SCD-RW #1, CD-R #2 & FD #146

HARRISON GYROSCOPES-STABILIZED FREE STANDING TOWERS AND MISSILE DEFENSE SYSTEMS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to the use of multiple large heavy (10,000 to 24,000 pounds and heavier) gyroscopes used to balance and stabilize very high (1000 to 500,000 feet high) free-standing towers that do not require supporting cables or other structural means to provide balance and stability to the towers. The towers shall contain and support the following heavy items: military radar antennas, military radar equipment, military or other communications equipment, military or other electronic coordination systems equipment, military or other heavy electric power generating equipment including multiple heavy military defense equipment and measures. These military defense measure shall include, but shall not be limited to, the following: antimissile missiles, multiple DEW (directed energy weapons), multiple HEL (high energy laser) cannons, multiple HPCW (high power carrier wave) cannons and other DEW (directed energy weapons) and equipment needed to defend against unwanted and hostile terrorist or other enemy incursions by manned or unmanned aircraft, cruise missiles, ICBM's (Intercontinental Ballistic Missiles), or other unlawful incursions of USA borders, borders of USA allies, deployed overseas, or otherwise deployed, armed forces of the USA and USA allies and other border defenses. Presently, the USA does not have adequate defenses against low flying and radar evading Cruise Missiles, ICBMS and other intrusions of USA borders. The current invention shall correct this problem by providing the lowest cost option for positioning defensive systems where look down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and very high electric power requirements are a major consideration, an important military advantage and a major military requirement.

2. Description of the Prior Art

There is no Prior Art to the best of the knowledge of this inventor. The use of very large and heavy gyroscopes (10,000 to 2400 pounds and heavier) to balance and stabilize very high (1000 feet tall to 500,000 feet tall) free standing towers, wherein the towers thereby do not require the use of cables or other structural means to provide balance and stability to the towers is not covered in the prior art. Such cables or other structural supports for very high towers have been required in the past, and are still required even now. These very high towers contain and support the following heavy equipment as follows: heavy military surveillance radar antennas, heavy military surveillance radars, heavy military and other communications

equipments and military coordination systems and equipment, as well as multiple military defense weapons and systems required to defend against multiple enemy manned or unmanned aircraft, multiple cruise missile attacks, multiple ICBMs (intercontinental ballistic missiles) attacks and other violations of USA borders. Military defense weapons include anti missile missiles, directed energy weapons such as, but are not limited to, the following: HEL (high energy lasers), HPCW (high power carrier waves) and the use of USA modern defense aircraft and their missile attack equipment. The current invention also provides the lowest cost option for positioning defensive systems where look-down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration, an important military advantage and a major military requirement. Thus, this application is not included in the public domain.

SUMMARY OF THE INVENTION

In view of the technical state of the USA not being prepared for the present border and air defenses of the USA, as described above in 1. Field of the Invention, the objective of the present invention is offered to correct this serious problem. Accordingly, the current invention, which shall be described subsequently in greater detail, is offered.

To attain the above objective, representative embodiments of the concepts of the present invention are illustrated in the drawings Fig. 1, Fig 2, Fig 3 and Fig. 4.

The present invention consists of gyroscopes-stabilized free standing towers that do not require the use of cables or other structural means to provide balance and stability to the towers. These towers support and contain large radar antennas, radar equipment, communications equipment, electronic coordination systems, electric power generating equipment and multiple defense measures and equipment needed to defend the USA, USA deployed armed forces and USA Allies against hostile terrorist or other enemy incursions by manned aircraft or unmanned aircraft, cruise missiles, ICBMs as well as other types of illegal USA border violations. The current invention thus provides the lowest cost option for positioning defensive systems where look-down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration, an important military advantage and a major military requirement. The present invention provides a near perfect long-range defense against military terrorist threats.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. 1 is a perspective front view of the current invention according to the first embodiment of the present invention.

Fig. 2 is a perspective side view of the current invention according to the first embodiment of the present invention.

FIG. 3 is a perspective view illustrating the major gyroscope working components.

Fig. 4 is a perspective view illustrating a large air supported cable reinforced structure.

Fig. 5 is a perspective view illustrating a smaller air supported structure that does not require cable reinforcement.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to FIG. 1 thereof, the following will be described:

FIG 1: More specifically, it will be noted that the first embodiment of FIG. 1 includes a perspective drawing of the front view of the current invention. FIG. 1 shows the following: 1 the cable reinforced air supported structure that serves as weather protection for the 2 radar antenna. Also 1 may contain the surveillance radar equipment, communications equipment and other related equipment as required. 3. The location of the laser cannon (and other ordinance equipment and other devices required as armament measures required to defend against incoming detected missiles and other threats. 4 the structural clamps as required to support the large heavy gyroscopes onto the towers are so indicated. 5 the structural clamps required to support the large heavy gyroscopes onto the towers. 6 the large heavy gyroscopes assemblies are schematically shown. The typical inner working components of the gyroscopes, which are the most critical and necessary components of the towers are shown schematically in FIG. 3 and described below. To continue with regard to FIG. 1, the ground level or water level 7 is shown schematically. It is noted that the towers may be built on the ground or on the water, which allows the towers to be built at sea off shores, in rivers, in lakes, in bays and other bodies of water. 8 the tower foundations shall usually be steel reinforced concrete pilings, or other pilings, driven down to ground rock. The tower foundations may also be other suitable foundations as dictated by local conditions. However, it is emphasized here that the tower foundations are normally driven down to ground rock in order to provide the towers with solid foundations.

Fig. 2 is a perspective drawing of the side view of the current invention. FIG. 2 shows the following: 1 the cable reinforced air supported structure that serves as weather protection for the 2 radar antenna. Also 1 may contain the surveillance radar equipment, communications equipment and other related equipment as required. 3. The location of the laser cannon (and other ordinance equipment and other devices required as armament measures required to defend against incoming detected missiles and other threats. 4 the structural clamps as required to support the large heavy gyroscopes onto the towers are so indicated. 5 the structural clamps required to support the large heavy gyroscopes onto the towers. 6 the large heavy gyroscopes assemblies are schematically shown. The typical inner working components of the gyroscopes, which are the most critical and necessary components of the towers are shown schematically in FIG. 3 and described below. To continue with regard to FIG. 2, the ground level or water level 7 is shown schematically. It is noted that the towers may be built on the ground or on the water, which allows the towers to be built at sea off shores, in rivers, in lakes, in bays and other bodies of water. 8 the tower foundations shall usually be steel reinforced concrete pilings, or other pilings, driven down to ground rock. The tower foundations may also be other suitable foundations as dictated by local conditions. However, it is emphasized here that the tower foundations are normally driven down to ground rock in order to provide the towers with solid foundations.

FIG. 3 denotes a perspective drawing of a gyroscope, and shows the components of a gyroscope. 9 denotes the gyroscope rotor which is the main gyroscope component that spins in the 13 gyroscope frame. The high speed spinning of the gyroscope rotor imparts the necessary high gyroscopic moment to the gyroscope. The high gyroscopic moment of the gyroscope provides the required balance and stability to the towers. 10 the rotor outer perimeter contains the maximum weight of the rotor, which imparts the maximum stabilizing gyroscopic moment to the gyroscope. The amount of weight placed in the 10 rotor perimeter is dependent upon fabrication techniques, the tensile strength of the rotor materials and other factors. 12 the thrust bearings serve to retain the 9 and 10 gyroscope rotor structurally and properly attached to the 13 gyroscope frame. The 12 magnetic thrust bearings are electronically controlled. This provides electronic control of such factors as unwanted vibration and other unwanted factors by the use of electronic damping. 11 the radial bearings of the 9 and 10 gyroscope rotor. 11 the radial bearings are connected to the 13 gyroscope frame but do not rotate with the 9 and 10 rotor or the 14 rotor shaft. 11 the magnetic radial bearings are electronically controlled. This provides electronic control of such factors as unwanted vibration and other unwanted factors by the use of electronic damping. 14 the rotor shaft is normally steel, or another suitable magnetic material, as required for the proper functioning of the magnetic thrust bearings and the magnetic radial bearings to perform. This maximizes rotor spin life by eliminating all metal-to-metal wearing contact between the spinning rotor 11 and 12, the 14 steel gyroscope shaft and 13

the gyroscope frame by controlling and restricting the location of the 14 rotor shaft using powerful magnetic flux, provided by powerful electro-magnets, rather than by the more well known means of metal to metal bearings which introduces metal-to-metal wearing contact accompanied by friction drag. This use of 12 magnetic thrust bearings and 11 magnetic radial bearings extends the expected maintenance free life of the gyroscopes to an estimated 200 years, providing there is no interruption of electric power to the magnetic bearings. Note: significant and large electric power is being continually generated by the towers themselves.

Fig. 4 denotes a perspective drawing of an air supported and cable-reinforced 200 foot in diameter air supported structure showing the reinforcing cables at intervals of approximately every 30 feet of the perimeter of the structure that is constructed of 5 mil thick Mylar polyester film. Air supported structures are normally built in the form of a hemisphere, but are also built in the shape of a Quonset structure to cover rectangular areas, such as swimming pools. All air supported structures are firmly supported by air that is maintained at a slightly higher pressure, of 5 psf higher than the air outside the air supported structure. This pressure differential is maintained electronically. Reinforcing cables are used to enable air supported structures to withstand very high wind conditions and other severe weather conditions. Each of the reinforcing cables are firmly and structurally attached to the ground or to the platform supporting the air supported structure. In Figure 4, at the lower right of the structure there is an air lock to enable entrance into the structure by trucks delivering building materials for the building being constructed inside the air supported structure with a minimal or no reduction of the air pressure inside the structure. Air supported structures are made of flexible films or materials such as, but not limited to, the following: Mylar polyester film a clear transparent DuPont product with a very high tensile strength of 25,000 psi that approaches the tensile strength of steel. Mylar is a long chain polymer composed of a cast film of polyethylene terephthalate that is orientated by being stretched in both the transverse direction and the longitudinal directions during it's manufacture; this process causes the molecules of the film to link, forming the long chains that contribute to the strength and other properties of the film. Other materials used for air supported structures include various vinyl films, hypalon coated nylon cloth, vinyl coated nylon cloth, Dacron and other cloths coated or not coated. Air supported structures are light weight, low cost structures normally used for the storage of materials and other uses.

Fig. 5 is an actual picture of a 60 foot diameter hemispheric shaped air supported structure, made of 5 mil thick Mylar polyester film, that does not require the use of reinforcement cables for stability in winds of 60 miles per hour to 100 miles per hour.

SPECIFICATION

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Detailed Description: The present invention relates to the use of multiple large and heavy (10,000 pounds to 24,000 pounds and heavier) gyroscopes that provide balance and stabilization to very high (1000 feet to 500,000 feet high) free-standing towers that thereby do not require use of supporting cables or other structural means to provide balance and stability to the towers. These gyroscopes-stabilized free standing towers support and contain anti-missile defense radar, communications systems and defensive weapons to protect the USA and it's Aillies against enemy cruise missiles, ICBMs and manned or unmanned aircraft and other unwanted or unlawful USA border penetrations. The above towers also provide border defense for the USA and USA Allies and deployed USA and USA Allies armed forces. Defensive weapons on or connected by communication systems to the towers would include, but shall not be limited to, anti-missile missiles, USA defensive aircraft, Directed Energy Weapons (but would not be limited to) DEW (directed energy weapons) such as HEL (High Energy Laser) weapons and HECW (High Energy Carrier Wave) weapons. The system described above would provide the lowest cost option for positioning defensive systems where look down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements, required to power the defensive weapons and other uses, are a major military consideration and are a military requirement. The design technique would include:

1. The use of very large and heavy (10,000 pounds to 24,000 pounds, and much higher) gyroscopes with very large gyroscopic moments to provide high tower balance and stability. The towers so balanced and stabilized shall therefore not require the use of structural cables or other stabilizing structures to provide tower balance and tower stability.
2. The gyroscopes described in 1 above shall be firmly secured to the towers every 100 feet; the axis of rotation of the gyroscope rotors shall be identical to the vertical center line of the tower. The gyroscopes shall weigh some 10,000 pounds to 24,000 pounds, or higher, with most gyroscope rotor weight concentrated at the perimeter of the gyroscope, and the rotor of the gyroscopes shall be rotating at the highest speed that the strength of the material from which the gyroscopes rotors are constructed will allow and still not fly apart, which shall be 2,500 RPM to 15,000 RPM, or higher, if the strength or other properties of the material from which the gyroscope rotors are made will permit. Further, the rotor thrust bearings and radial bearings shall be the best available, of metal or other material or materials, to promote the maximum effective lifetime of the gyroscopes. Accordingly, the thrust bearings and radial bearings shall be magnetic bearings, which shall contain the rotors of the gyroscopes in a magnetic flux, thereby eliminating all metal-to-metal wearing contact of the gyroscope rotors, which are the major moving part in the gyroscopes. This shall prolong the maintenance free lifetime of the rotors to an estimated 200 or more

years, provided that electric power to the gyroscopes is not interrupted. Note that electric power is continually generated by the towers themselves. The gyroscopes shall be contained in hermetically sealed containers to improve their lifetime..

3. The tower vertical structural supporting legs shall be round, square, rectangular or any other shape in cross-section; shall be made of a clear material such as Lucite, or any other suitable material; and shall contain or support photo-electric panels for the purpose of generating electric power. There shall be at least one structural supporting leg or many more structural supporting legs as required by structural requirements or electric power requirements. Note that the structural legs shown in Figure 1 and Figure 2 show six (6) structural tower legs. More structural legs shall be used as and if required structurally or as required for electric power generation purposes.

4. The towers shall have wind power electric power generators attached as often as is practical. Our plan is to attach such wind power generators every 50 feet of tower height.

5. Radar antenna shall be attached at the top of the towers, and every 1000 feet of tower height. The antenna and associated equipment shall be weather protected via an air-supported cable-reinforced structure or by other means.

6. A special pressurized elevator shall be attached to each tower to enable access to the radar antenna, radar equipment and other servicing as needed.

CLAIMS

1. Very tall towers that are 1000 feet tall to 500,000 feet tall, and higher, that contain large heavy gyroscopes every 100 feet of tower height that weigh 10,000 pounds to 24,000 pounds, or even heavier, to balance and stabilize the towers, thus negating the need to use cables or other structures to provide balance and stability for the towers, the system comprising:

(a) the towers shall contain and support multiple surveillance radar equipments, multiple radar antennas, both military or commercial communications equipments, defense coordination equipments and defensive weapon systems to defend the USA and USA allies against cruise missiles, ICBM's, manned or unmanned aircraft, as well as to defend against all hostile, harmful, unlawful or unwanted violations of USA borders;

(b) the use of clear or other structural members (such as Lucite, steel, carbon composite fiber or other materials) suitable to contain, or support, photoelectric power panels for the purpose of generating significant electric power;

(c) the use of wind power electric generators attached every 50 feet of tower height, either more or less, on the high free-standing towers for generating significant electric power; and

(d) the use of special pressurized elevators to construct, service and maintain the high 1000 feet high to 500,000 feet high, and higher, free-standing military, communication, commercial and power generation towers.

2. The use of the current invention as a primary source for generating electric power which is both non-polluting to the environment and renewable; such electricity shall be herein afterwards referred to as green electric power; green electric power generation does not pollute the air, the earth, or any other aspect of our environment, as does electricity generated using such fuels as petroleum, coal, natural gas, nuclear fuel and all other such non-renewable fuels that shall eventually be depleted, the system comprising;

(a) wind power electrical power generators placed every 50 feet or more of tower height; and

(b) photoelectric power panels inside of, or attached to, the tower structural legs.

3. The system of claim 2, at heights of 50,000 feet to 100,000 feet or higher, generating the equivalent of the electric power generated by a conventional power plant fueled by coal, petroleum, natural gas or nuclear fuel and at an estimated cost of 25% to 10% of the cost of generating electricity using conventional fuels.
4. The system of claim 2 further using green electric power to aerate the streams, rivers, bays and virtually all other waterways, which are now dangerously polluted, are actually expiring, and are technically and literally in the process of becoming barren of underwater life, due primarily to the lack of dissolved oxygen, caused by human pollution from storm water run-off, improperly designed and improperly managed waste water treatment plants, and the improper and excessive use of chemical fertilizer needed to produce food for humans.
5. The system of claim 2 further using the wide-spread generation and use of this green electric power to reduce the USA's existing dependency upon foreign oil sources.
6. The system of claim 2, if cost-shared with claim 1, would further reduce the cost of green electric power, and thus would escalate the importance of claim 2's feature of the gyroscopes-stabilized free- standing towers.

CHANGE OF CORRESPONDENCE ADDRESS Application Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number	10066172
	Filing Date	11/28/02
	First Named Inventor	W. J. Harrison, Jr.
	Art Unit	3612
	Examiner Name	Ms. Kimberly T. Woods
Attorney/Agent Number		

Please change the Correspondence Address for the above-identified patent application to:

☐ This address associated with Customer Number:

OR

☒ Firm or Individual Name: William E. Harrison, Jr.

Address: 1581 Pendulo Court

City: Methuen State: Florida Zip: 32540

Country: USA

Telephone: (321) 752-5489 Fax: (321) 253-8861

This form cannot be used to change the data associated with a Customer Number. To change the data associated with an existing Customer Number use "Request for Customer Number Data Change" (PTO/SS-124).

I am the:

☒ Applicant/Inventor

☐ Assignee of record of the entire interest. Statement under 37 CFR 3.73(h) is enclosed. (Form PTO/SS-906)

☐ Attorney or agent of record. Registration Number: _____

☐ Registered practitioner named in the application transmittal; refer to an application without an executed oath or declaration. (See 37 CFR 1.39(a)(1). Registration Number: _____)

Signature: William E. Harrison, Jr.

Typed or Printed Name: William E. Harrison, Jr.

Date: October 18, 2004 Telephone: (321) 752-5489

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required. See below.

☐ Total of: 1 forms are submitted.

This collection of information is required by 37 CFR 1.33. The information is required to obtain or retain a benefit by the public which is to be paid by the USPTO in processing an application. Confidentiality is governed by 35 U.S.C. 422 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form should be submitted to the USPTO. Should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FILLS OR COMPLETED FORMS TO THE ADDRESS. SEND THE Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ATTACHMENT 5

FACSIMILE TRANSMISSION COVER SHEET

Date: April 21, 2005

**TO: Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Telephone: (703) 308-1202**

Reference: Your enclosed Office communication dated 04/18/05, marked Attachment A, re. my CIP for Application No. 10/065,872. Also attached, marked Attachment B, is a copy of my CIP as duly and timely submitted on 09/06/04, which included my USPTO Form with my VISA card information that authorized payment of all fees due.

FROM: Wilbur E. Harrison, Jr.
FAX: (321) 253-8961
TELEPHONE: (321) 752-5489; Cellular: (321) 652-9676.
LOCATION: 1581 Perdido Court
Melbourne, Florida 32930-6226

SUBJECT: The Reference Office Communication dated 04/18/2005 was a Notice of missing late oath fee.

COMMENTS:

1. My CIP for Application No. 10/065,872 was duly and timely submitted on 09/06/2004, with my Oath Form and my VISA credit card Form to pay all fees. Please see Attachment B for a copy.

2. As references, please contact the following at the USPTO:

___ Ms. Kimberly T. Wood, USPTO Patent Examiner, Art Unit 3632
Fax: (703) 308-0539
Telephone: (703) 308-0539

In a telephone call to me from Ms. Wood on 02/21/05, Ms. Wood confirmed receipt of my CIP re. Application Number 10/065,872 in a timely manner. At that time, I assured Ms. Wood that I had not abandoned the Referenced Patent Application. During our conversation Ms. Wood mentioned that Ms. Doshie Day of the USPTO, Office of Initial Patent Examination, Fax: (703) 305-9932; Telephone: (703) 308-3640, had entered my CIP submittal into the USPTO computer and that it was in good order, timely submitted and contained my completed USPTO credit card Form submitted to pay for all fees.

___ Ms. Doshie Day, USPTO Office of Initial Patent Application
Fax: (703) 305-9822
Telephone: (703) 308-3640

I received two telephone calls from Ms. Day on 12/27/04, and on 03/28/05. Ms. Day stated that she had cleared-up my file in the USPTO computer and that my file was in good order, was timely submitted and complete with all required fees, authorized to be paid via my VISA card.

3. If you can not manage to coordinate and resolve this matter with Ms. Day or Ms. Wood, I hereby authorize you to charge \$65.00 to my VISA card # 4417 1221 6838 6945 valid thru 11/05.

Thank you for your cooperation.

Sincerely,

Wilbur E. Harrison

NUMBER OF PAGES INCLUDING COVER: 26
Microsoft Word; File: 4984142.doc; saved in H.D.E, CD-RW #2, CD-R #2 & FD 145.

CC: Ms. Kimberly T. Wood
CC: Ms. Doshie Day

---ATTACHMENT A---

Page 1 of 2



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Patent Center
 400 7th Street, NW
 Washington, DC 20540-4400

APPLICATION NUMBER	FILING OR FEE DATE	FIRST NAMED APPLICANT	ATTORNEY/AGENT NUMBER
10/939,207	09/13/2004	Wilbur Ernest Harrison	

Wilbur E. Harrison, Jr.
 1501 Perdido Court
 Maitland, FL 32940

CONFIRMATION NO. 3442

FORMALITIES LETTER



0000000016756153

Date Mailed: 04/18/2005

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 03/16/2005 to the Notice to File Missing Parts (Notice) mailed 11/12/2004 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice:

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.138 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above identified application. Replies should be mailed to: Mail Stop Missing Parts, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

- Late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(f) of \$65 was not received.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is \$65 for a Small Entity.

- \$65 Late oath or declaration Surcharge

Replies should be mailed to: Mail Stop Missing Parts
 Commissioner for Patents
 P.O. Box 1450
 Alexandria VA 22313-1450

A copy of this notice MUST be returned with the reply.

Carlton M. ...
 Office of Initial Patent Examination (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: 2200 E. Zeeb Road, Alexandria, Virginia 22304-4194
 Web: www.uspto.gov

APPLICATION NUMBER	FILING OR ISSUE DATE	FIRST NAMED APPLICANT	ATTY DOCKET #/TITLE
10,939,297	09/13/2004	Wilbur Erice Harrison	

Wilbur E. Harrison, Jr.
 1531 Perido Court
 Melbourne, FL 32940

CONFIRMATION NO. 3442

WITHDRAWAL NOTICE



"XC600000015755187"

Date Mailed: 04/18/2005

WITHDRAWAL OF PREVIOUSLY SENT NOTICE

The Notice mailed on 02/03/2005 was sent in error and is hereby withdrawn. A corrected Notice is enclosed. The time period for reply runs from the mail date of the corrected Notice. The Office regrets any inconvenience the error may have caused.

A copy of this notice MUST be returned with the reply.

Customer Service Center
 Initial Patent Examination Division (763) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

Attachment B

PTO/SB/05 (2-94)
Approved for use through 12/31/2000. Please note: 2002
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Project of 1995, no response is required in response to a collection of information unless a separate valid OMB control number is provided.

UTILITY PATENT APPLICATION TRANSMITTAL		Priority Document No.	
(Only for non-provisional applications under 37 CFR 1.53(a))		First Inventor	Walter E. Harrison, Jr.
		Title	Hormone-Induced Tumor Model
		Exhibit Label No.	

APPLICATION ELEMENTS	ADDRESS TO:
<p>(See MPEP chapter 600 concerning utility patent application procedures.)</p> <p>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)</p> <p>2. <input checked="" type="checkbox"/> Application claims serial number. (See 37 CFR 1.52)</p> <p>3. <input checked="" type="checkbox"/> Specification (Total Pages: 5) (Submitted separately per form below) Description of the Invention Cross-References to Related Applications Statement Regarding Prior Art Reference to sequence listing, a table, or a computer program listing appendix Background of the Invention Brief Summary of the Invention Brief Description of the Drawings (if filed) Detailed Description Claims Abstract (in the English language)</p> <p>4. <input checked="" type="checkbox"/> Drawings (35 U.S.C. 113) (Total Sheets: 5)</p> <p>5. Oath or Declaration (Total Sheets: 5) a. <input checked="" type="checkbox"/> Newly submitted (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.65(c)) (The information must be filed with the application)</p> <p><input type="checkbox"/> DECLARATION OF INVENTOR(S) (Signatures must be filed with the application; see 37 CFR 1.63(c)(2) and 1.63(c)(3))</p> <p>6. <input type="checkbox"/> Application Data Sheet (See 37 CFR 1.76)</p>	<p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large text or Computer Program (Appendix A)</p> <p>8. <input type="checkbox"/> Disclosure and/or other Acid Sequence Submission (if appropriate, all necessary) a. <input type="checkbox"/> Computer Readable Form (CRF) b. <input type="checkbox"/> Specification Sequence Listing on c. <input type="checkbox"/> CD-ROM or CD-R (3 copies), or d. <input type="checkbox"/> Paper</p> <p>9. <input type="checkbox"/> Statements involving identity of above copies</p>

ACCOMPANYING APPLICATION PARTS	
<p>10. <input type="checkbox"/> 37 CFR 2.75(b) Statement (Power of Attorney (when there is an assignee))</p> <p>11. <input type="checkbox"/> English Translation Document (if applicable)</p> <p>12. <input type="checkbox"/> Information Disclosure (if applicable)</p> <p>13. <input type="checkbox"/> Statement (37 CFR 1.46)</p> <p>14. <input type="checkbox"/> Preliminary Amendments</p> <p>15. <input type="checkbox"/> Return Receipt Postcard (MPEP 603) (Should be immediately returned)</p> <p>16. <input type="checkbox"/> Certified Copy of Priority Documents (if foreign priority is claimed)</p> <p>17. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (by 25 B.R. Applicant must also file form PTO/SB/05 or its equivalent)</p> <p>18. <input type="checkbox"/> Other</p>	<p>19. <input type="checkbox"/> CONTINUING APPLICATION: Check appropriate box and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: <input type="checkbox"/> Continuation <input type="checkbox"/> Divisional <input checked="" type="checkbox"/> Continuation-in-part (CIP) (If prior application No. 10/265,672)</p> <p>For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5a, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a purpose has been inventively stated from the submitted application parts.</p>

19. CORRESPONDENCE ADDRESS	
<p><input type="checkbox"/> Correspondence Address</p> <p>Name: Walter E. Harrison, Jr. Address: 240 Elmwood Road City: Baltimore State: Maryland Country: USA Telephone: 410-747-6025 Fax: 410-747-6026</p>	<p>OR <input checked="" type="checkbox"/> Correspondence address below</p> <p>Name (Print Type): Walter E. Harrison, Jr. Designation: Attorney/Agent Date: September 05, 2004</p>

This collection of information is required by 37 CFR 1.53(a). The information is provided to allow or retain a benefit by the public which is to be used by the USPTO to process an application. Confidentiality is provided by 36 U.S.C. 172 and 37 CFR 1.14. This material is exempted to take 12 minutes in complete, including gathering, reviewing, and extending the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form should be sent to the USPTO. Time should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1460, Alexandria, VA 22313-1460. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Correspondence for Patents, P.O. Box 1460, Alexandria, VA 22313-1460.

If you need assistance in completing the form, call 1-800-PTO-5199 and select option 2.

Approved for use through 07/01/2008. OMB 0891-0002
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Effective 10/01/2003. Patent fees are subject to annual revision.

FEE TRANSMITTAL for FY 2004

Complete if Known

Application Number: _____
Filing Date: _____
First Named Inventor: _____
Examiner Name: _____
Art Unit: _____
Attorney/Agent No.: _____

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT: (3) 356.00

METHOD OF PAYMENT (check all that apply):
☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ Note
☐ Deposit Account:
 Deposit Account Number: _____
 Deposit Account Name: _____

The Director is authorized to: (check all that apply)
☐ Charge fees indicated below ☐ Debit any overpayment
☐ Charge any additional fees or any underpayment of fees
☐ Charge fees indicated below, except for the filing fee, to the above identified deposit account

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code (S)	Fee Description	Fee Paid
1001	2001	300	Utility filing fee	795.00
1002	2002	170	Design filing fee	
1003	2003	250	Plant filing fee	
1004	2004	385	Reissue filing fee	
1005	2005	30	Provisional filing fee	
SUBTOTAL (1)				(3) 795.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Large Entity	Small Entity	Fee Code (S)	Fee Description	Fee Paid
1202	2202	5	Claims in excess of 20	
1201	2201	43	Independent claims in excess of 3	
1203	2203	140	Multiple dependent claims, if not paid	
1204	2204	43	Reissue independent claims over original patent	
1205	2205	2	Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)				(3) 0

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code (S)	Fee Description	Fee Paid
1051	2051	55	Surcharge - late filing fee or cash	
1052	2052	75	Surcharge - late provisional filing fee or other filing	
1063	2063	130	Non-English specification	
1012	2012	2,500	For filing a request for ex parte reexamination	
1804	2804	620	Requesting publication of SR prior to Examiner action	
1605	2605	1,640	Requesting publication of SR after Examiner action	
1251	2251	60	Extension for reply within first month	
1252	2252	210	Extension for reply within second month	
1253	2253	475	Extension for reply within third month	
1254	2254	740	Extension for reply within fourth month	
1255	2255	1,005	Extension for reply within fifth month	
1401	2401	105	Notice of Appeal	
1402	2402	165	Filing a brief in support of an appeal	
1403	2403	145	Request for oral hearing	
1401	2401	1,510	Petition to institute a public use proceeding	
1402	2402	65	Petition to revise - Unavailable	
1403	2403	885	Petition to revise - Unavailable	
1501	2501	600	Utility issue fee (for release)	
1502	2502	240	Design issue fee	
1503	2503	325	Plant issue fee	
1400	2400	130	Problems to the Commissioner	
1507	2507	90	Processing fee under 37 CFR 1.41(a)	
1508	2508	190	Submission of Information Disclosure Sheet	
8021	8021	40	Resolving patent assignment per property (series number) of property	
1608	2608	285	Filing a submission after final rejection (37 CFR 1.128(a))	
1513	2513	110	For each additional invention to be examined (37 CFR 1.120(b))	
1501	2501	585	Request for Continued Examination (RCE)	
1502	2502	300	Request for expedited examination of a design application	
SUBTOTAL (3)				(3) 0

Other fee (specify): _____
 (Reduced by Basic Filing Fee Paid)

Signature: Walter F. Harrison Registration No. _____
 Signature: Walter F. Harrison Telephone: 710-747-8525
 Date: 09/07/04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2036.

The collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public effort is to file (and by the USPTO to process) an application. Consideration is governed by 35 U.S.C. 120 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, reviewing, and submitting the completed application form to the USPTO. There will vary depending upon the individual case. Any comments on the amount of time you require to complete this form under suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1470, Alexandria, VA 22315-1470. DO NOT SEND FEE OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1470, Alexandria, VA 22315-1470.

If you need assistance in completing this form, call 1-800-PTO-0199 and select option 2.

PTOL65-01 (08-03)
Approved for use through 07/31/2008. FORM 0051 03/04
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Patent, Protection Act of 1952, no person is entitled to receive a patent unless he or she is a citizen of the United States or a resident alien.

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

<input type="checkbox"/> Declaration Submitted with initial filing OR <input checked="" type="checkbox"/> Declaration Submitted after initial filing (surcharge, 37 CFR 1.63(e) required)	Attorney/Agent Number First Named Inventor COMPLETE IF KNOWN Application Number Filing Date Art Unit Examiner Name
---	--

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe this inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Harrison Gyroscope-Stabilized Free Standing Towers And Missile Defense Systems

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY) as United States Application Number or PCT International Application Number and was amended on (MM/DD/YYYY) (if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.55, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking this box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed		Certified Copy Attached?	
			Yes	No	Yes	No
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

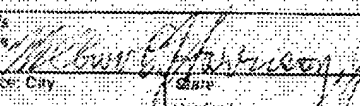
☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SF-025 attached hereto.

(Page 1 of 2)

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.62. The information is required in order to retain a benefit by the public which is to be used by the USPTO in processing an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is submitted to page 25, minutes to complete, including gathering, preparing, and certifying the completed application, form in the USPTO. This set very beginning upon the standard case. Any comments on the extent of time you require to complete this form and/or suggestions for making this better, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22315-1450, DO: (571) 280-1000. FAX: (571) 280-1000. IF YOU HAVE COMPLETED FORMS FOR THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22315-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 and select option 2.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: <input type="checkbox"/> Customer Number: <input type="text"/> OR <input checked="" type="checkbox"/> Correspondence address below			
Name William E. Harrison, Jr.			
Address 228 Somerset Road			
City Baltimore		State Maryland	ZIP 21228-5443
Country USA	Telephone (410) 747-3325	Fax (410) 747-5930	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued hereinafter.			
NAME OF SOLE OR FIRST INVENTOR: <input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any]) William Ernest		Family Name or Surname Harrison	
Inventor's Signature 		Date September 8, 2004	
Residence: City Baltimore	State Maryland	Country USA	Citizenship USA
Mailing Address 228 Somerset Road			
City Baltimore	State Maryland	ZIP 21228-5443	Country USA
NAME OF SECOND INVENTOR: <input type="checkbox"/> A petition has been filed for this unsigned inventor			
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City	State	Country	Citizenship
Mailing Address			
City	State	ZIP	Country
<input type="checkbox"/> Additional inventors or a single representative are being named on the supplemental sheet(s) PTO/SB-02A or 02A-R attached herein.			

United States Patent and Trademark Office
Credit Card Payment Form
Please Read Instructions before Completing this Form

Credit Card Information			
Credit Card Type: <input checked="" type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> American Express <input type="checkbox"/> Discover			
Credit Card Account #: 4417 1221 8938 8845			
Credit Card Expiration Date: 11/05			
Name as it Appears on Credit Card: Wilbur B. Harrison			
Payment Amount \$ (U.S. Dollars): 385.00			
Cardholder Signature: <i>Wilbur B. Harrison</i>		Date: September 8, 2004	
<small>Refund Policy: The Office may refund a fee paid by mistake or in excess of the amount provided. A change of purpose after the payment of a fee will not entitle a party to a refund of such fee. The Office will not refund amounts of \$25.00 or less unless a refund is specifically requested, and will not refund the payment of such amounts. (37 CFR § 1.201). The refund of a fee paid by credit card will be issued as a credit to the credit card account to which the fee was charged.</small>			
<small>Service Charge: There is a \$60.00 service charge for processing each payment refused (including a check returned "unpaid") or charged back by a financial institution. (37 CFR § 1.21 (m)).</small>			
Credit Card Billing Address			
Street Address 1: 220 Stonewall Road			
Street Address 2:			
City: Baltimore			
State/Province: Maryland		Zip/Postal Code: 21226-5433	
Country: USA			
Daytime Phone #: 410-747-8328		Fax #: 410-747-8936	
Request and Payment Information			
Description of Request and Payment Information:			
Basic filing fee for a CIP (continuation in part)			
<input checked="" type="checkbox"/> Patent Fee	<input type="checkbox"/> Patent Maintenance Fee	<input type="checkbox"/> Trademark Fee	<input type="checkbox"/> Other Fee
Application No. 10/065,372	Application No.	Application No.	EXON Customer No.
Patent No.	Patent No.	Registration No.	
Attorney/Agent No.		Identify or Describe Mark	

If the cardholder includes a credit card number on any form or document other than the Credit Card Payment Form, the United States Patent and Trademark Office will not be liable in the event that the credit card number becomes public knowledge.

UNITED STATES PATENT INVENTION APPLICATION

INVENTION: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr. 226 Stonewall Road, Baltimore, MD 21228-5443

Application Control No. 10/065,872

Correspondence Address:

Wilbur E. Harrison, Jr.

226 Stonewall Road

Baltimore, Maryland 21228-5443

Filed originally: Nov. 26, 2002. Date of this continuation-in-part: September 07, 2004.

Related U.S. Application Data

Continuation-in-part of Application Control no. 10/065,872.

Other Publications

Arnold, Ronald N., and Leonard Maunder, *Gyrodynamics and Its Engineering Applications*,

New York and London: Academic Press, Inc., 1961.

Burger, W., and A. G. Corbet, *Ship Stabilizers, Their Design and Operation in Correcting the Rolling of Ships; A*

Handbook for Merchant Navy Officers, London: Pergamon Press Ltd., 1966.

Crabtree, Harold, *An Elementary Treatment of the Theory of Spinning Tops and Gyroscopic Motion*, 3rd ed., New York: Chelsea Publishing Company, 1967.

Deimel, Richard F., *Mechanics of the Gyroscope*, New York: Deaver Publications, Inc., 1950.

Richardson, K. I. T., *The Gyroscope Applied*, London: Hutchinson's Scientific and Technical Publications, 1954.

Ross, James F. S., *The Gyroscopic Stabilization of Land Vehicles*, London: Edward Arnold & Co., 1933.

Scarborough, James B., *The Gyroscope, Theory and Applications*, New York and London: Interscience Publishers, 1958.

Schilovsky, P. P., *The Gyroscope: Its Practical Construction and Application*, New York: Chemical Publishing Corp. of N.Y., Inc., 1938.

www.mariner.connectfree.co.uk/html/gyro.htm Website about gyroscopes with diagrams and calculations.

ABSTRACT

Gyroscopes-stabilized free standing towers and missile defense systems are described that can support and contain surveillance radar, communication systems including electronic coordination systems and defensive weapon systems against cruise missiles, ICBMs, manned and unmanned aircraft, as well as other illegal penetration of USA borders. The current invention shall provide the lowest cost option for positioning systems where look-down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and high electrical power requirements are a major consideration and are a military requirement. Additionally, high electrical power generating capacity is included in this invention.

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.

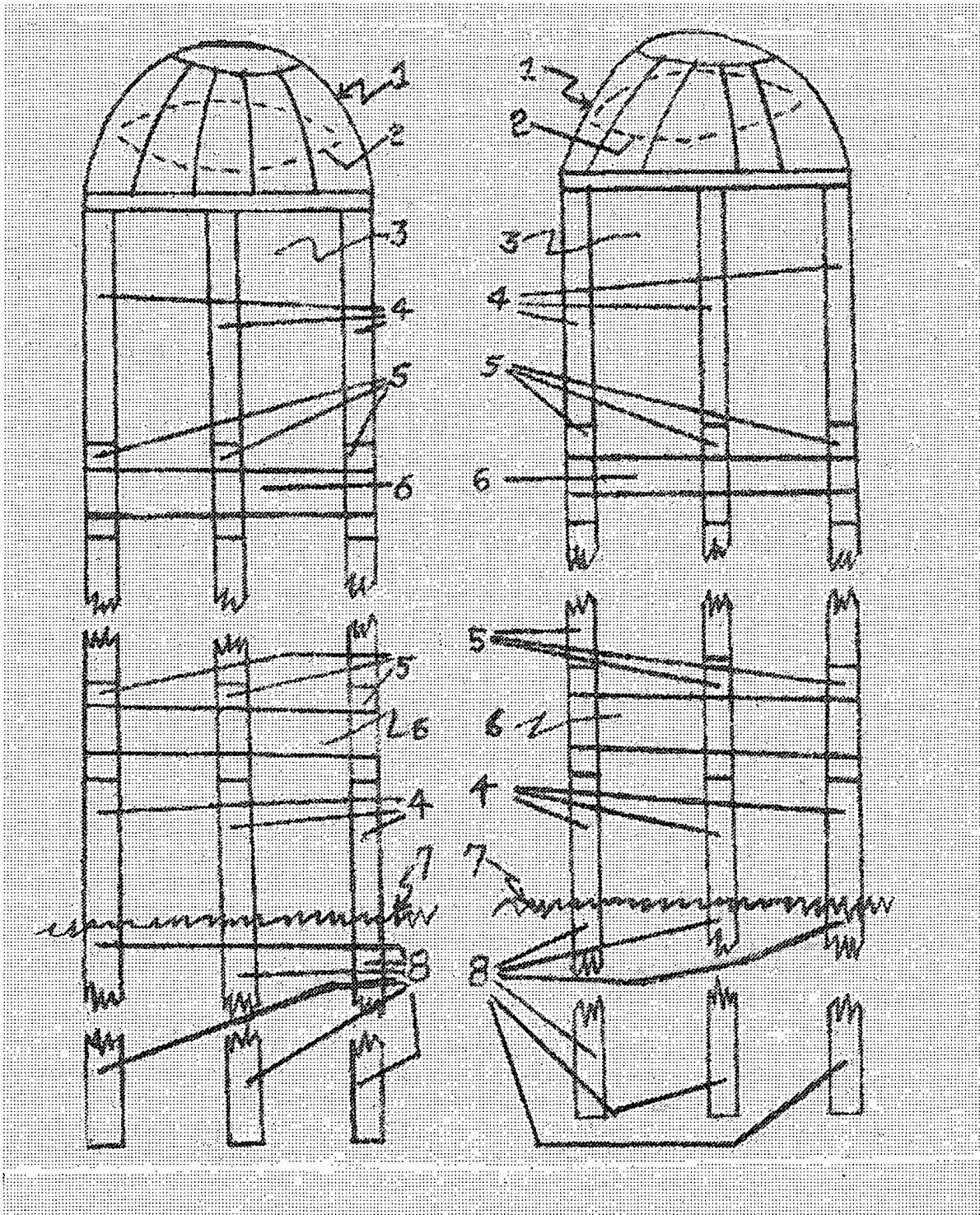


Figure 1
Scale: 1/16 Inch = 1.0 foot

Figure 2
Scale: 1/16 Inch = 1.0 foot

U.S. Patent Application Sheet 2 of 4

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.

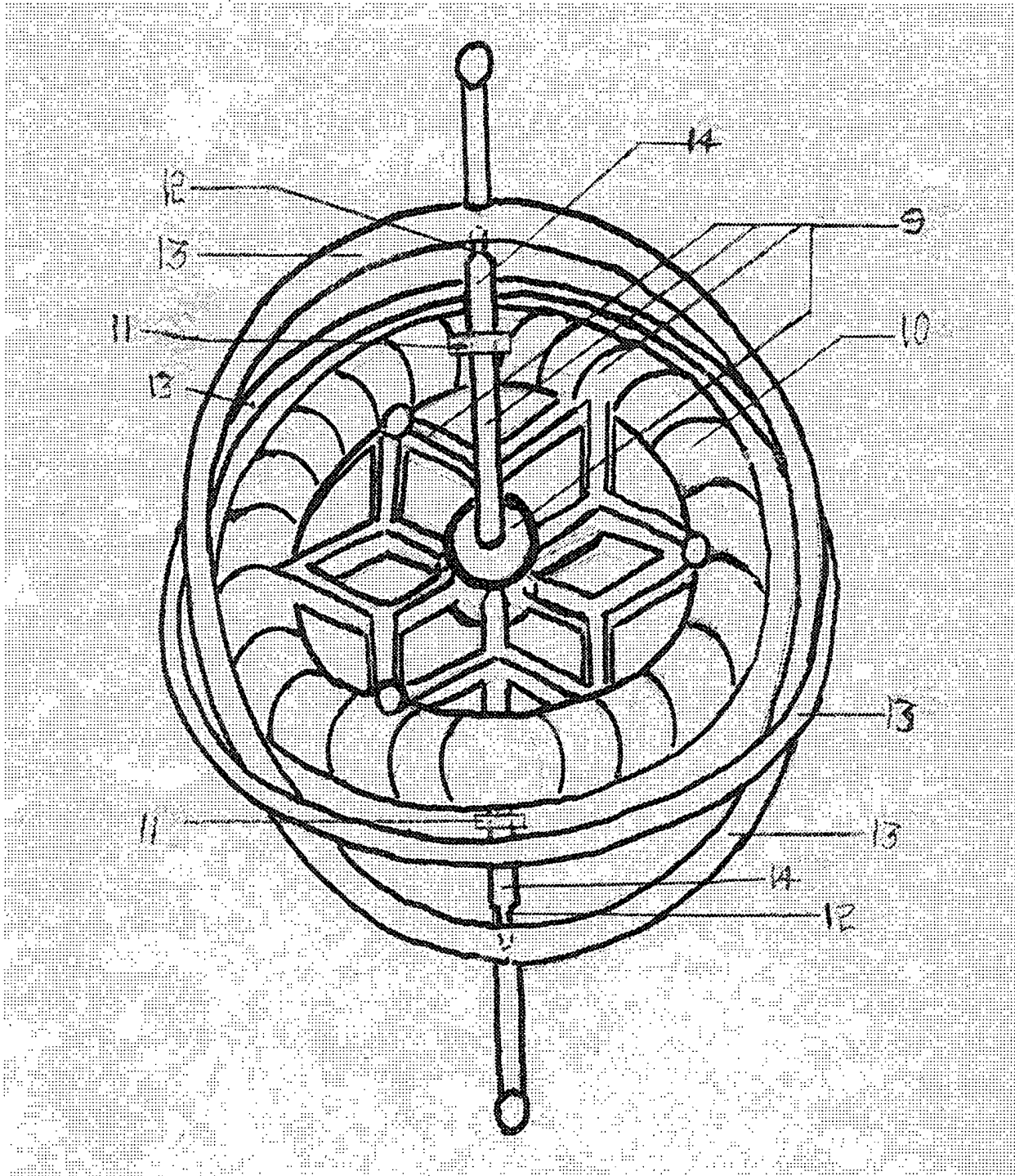
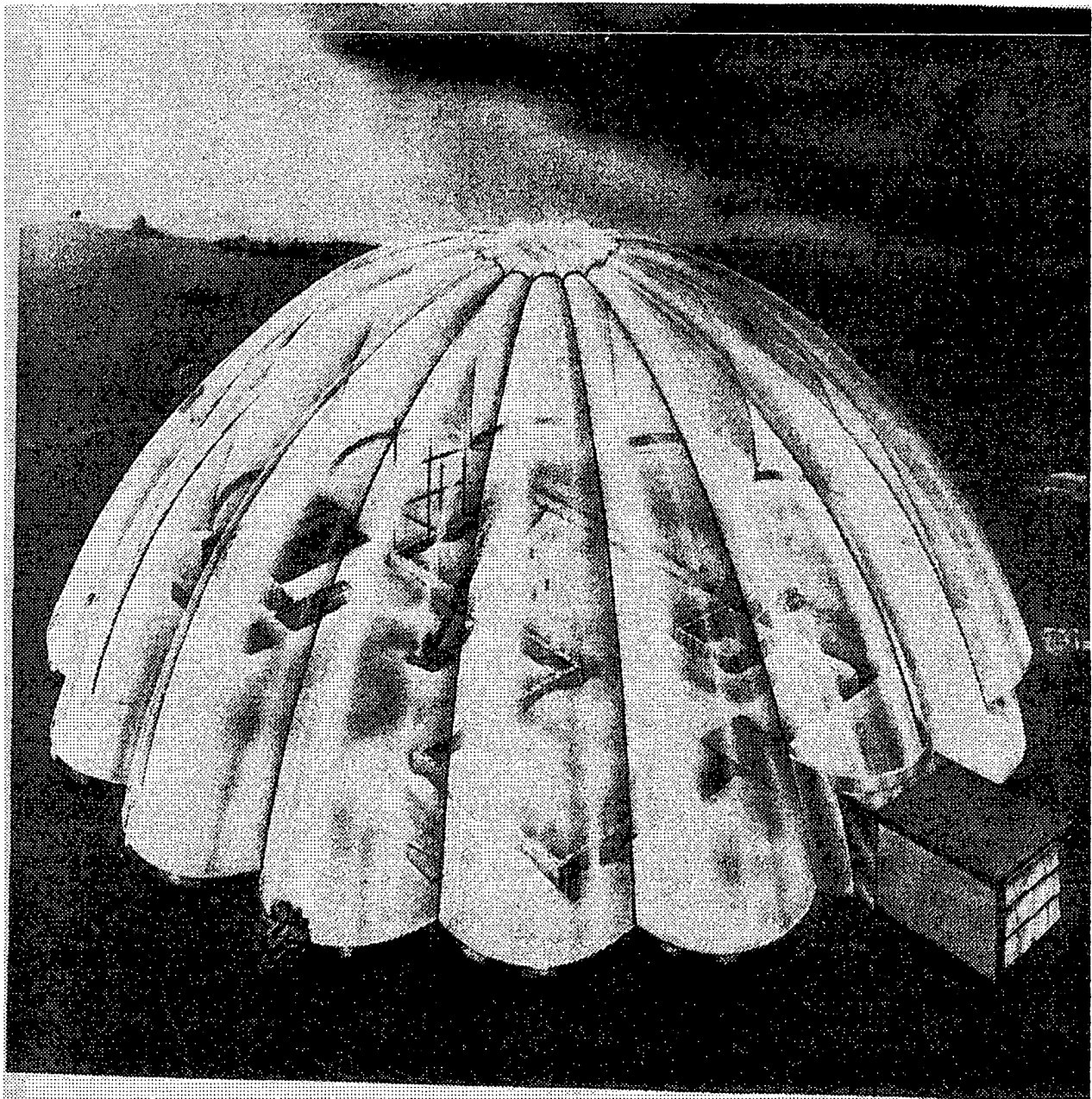


Figure 3
Scale: No Scale

U.S. Patent Application Sheet 3 of 4

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.



SOLAR HEATED AIR SUPPORTED STRUCTURE (DIAMETER: 200 FEET)

DESIGNED FOR: E. I. DU PONT DE NEMOURS & CO., INC.

WILMINGTON, DELAWARE

* PROJECT MANAGER & DESIGNER: WILBUR E. HARRISON

Figure 4

Scale: No Scale

U.S. Patent Application Sheet 4 of 4

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Inventor: Wilbur E. Harrison, Jr.



SOLAR HEATED AIR SUPPORTED STORAGE STRUCTURE (Diameter: 60 Feet)

Designed For: E.I. Du Pont De Nemours & Co., Inc. Wilmington, Delaware

* Project Manager & Designer: Wilbur E. Harrison

Figure 5

Scale: No Scale

HARRISON GYROSCOPES-STABILIZED FREE STANDING TOWERS AND MISSILE DEFENSE SYSTEMS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to the use of multiple large heavy (10,000 to 24,000 pounds and heavier) gyroscopes used to balance and stabilize very high (1000 to 500,000 feet high) free-standing towers that do not require supporting cables or other structural means to provide balance and stability to the towers. The towers shall contain and support the following heavy items: military radar antennas, military radar equipment, military or other communications equipment, military or other electronic coordination systems equipment, military or other heavy electric power generating equipment including multiple heavy military defense equipment and measures. These military defense measure shall include, but shall not be limited to, the following: antimissile missiles, multiple DEW (directed energy weapons), multiple HEL (high energy laser) cannons, multiple HPCW (high power carrier wave) cannons and other DEW (directed energy weapons) and equipment needed to defend against unwanted and hostile terrorist or other enemy incursions by manned or unmanned aircraft, cruise missiles, ICBM's (Intercontinental Ballistic Missiles), or other unlawful incursions of USA borders, borders of USA allies, deployed overseas, or otherwise deployed, armed forces of the USA and USA allies and other border defenses. Presently, the USA does not have adequate defenses against low flying and radar evading Cruise Missiles, ICBMS and other intrusions of USA borders. The current invention shall correct this problem by providing the lowest cost option for positioning defensive systems where look down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and very high electric power requirements are a major consideration, an important military advantage and a major military requirement.

2. Description of the Prior Art

There is no Prior Art to the best of the knowledge of this inventor. The use of very large and heavy gyroscopes (10,000 to 2400 pounds and heavier) to balance and stabilize very high (1000 feet tall to 500,000 feet tall) free standing towers, wherein the towers thereby do not require the use of cables or other structural means to provide balance and stability to the towers is not covered in the prior art. Such cables or other structural supports for very high towers have been required in the past, and are still required even now. These very high towers contain and support the following heavy equipment as follows: heavy military surveillance radar antennas, heavy military surveillance radars, heavy military and other communications

equipments and military coordination systems and equipment, as well as multiple military defense weapons and systems required to defend against multiple enemy manned or unmanned aircraft, multiple cruise missile attacks, multiple ICBMs (intercontinental ballistic missiles) attacks and other violations of USA borders. Military defense weapons include anti missile missiles, directed energy weapons such as, but are not limited to, the following: HEL (high energy lasers), HPCW (high power carrier waves) and the use of USA modern defense aircraft and their missile attack equipment. The current invention also provides the lowest cost option for positioning defensive systems where look-down surveillance, look-over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration, an important military advantage and a major military requirement. Thus, this application is not included in the public domain.

SUMMARY OF THE INVENTION

In view of the technical state of the USA not being prepared for the present border and air defenses of the USA, as described above in 1. Field of the Invention, the objective of the present invention is offered to correct this serious problem. Accordingly, the current invention, which shall be described subsequently in greater detail, is offered.

To attain the above objective, representative embodiments of the concepts of the present invention are illustrated in the drawings Fig. 1, Fig 2, Fig 3 and Fig. 4.

The present invention consists of gyroscopes-stabilized free standing towers that do not require the use of cables or other structural means to provide balance and stability to the towers. These towers support and contain large radar antennas, radar equipment, communications equipment, electronic coordination systems, electric power generating equipment and multiple defense measures and equipment needed to defend the USA, USA deployed armed forces and USA Allies against hostile terrorist or other enemy incursions by manned aircraft or unmanned aircraft, cruise missiles, ICBMs as well as other types of illegal USA border violations. The current invention thus provides the lowest cost option for positioning defensive systems where look-down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements are a major consideration, an important military advantage and a major military requirement. The present invention provides a near perfect long-range defense against military terrorist threats.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

FIG. 1 is a perspective front view of the current invention according to the first embodiment of the present invention.

Fig. 2 is a perspective side view of the current invention according to the first embodiment of the present invention.

FIG. 3 is a perspective view illustrating the major gyroscope working components.

Fig. 4 is a perspective view illustrating a large air supported cable reinforced structure.

Fig. 5 is a perspective view illustrating a smaller air supported structure that does not require cable reinforcement.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to FIG. 1 thereof, the following will be described:

FIG 1: More specifically, it will be noted that the first embodiment of FIG. 1 includes a perspective drawing of the front view of the current invention. FIG. 1 shows the following: 1 the cable reinforced air supported structure that serves as weather protection for the 2 radar antenna. Also 1 may contain the surveillance radar equipment, communications equipment and other related equipment as required. 3. The location of the laser cannon (and other ordinance equipment and other devices required as armament measures required to defend against incoming detected missiles and other threats. 4 the structural clamps as required to support the large heavy gyroscopes onto the towers are so indicated. 5 the structural clamps required to support the large heavy gyroscopes onto the towers. 6 the large heavy gyroscopes assemblies are schematically shown. The typical inner working components of the gyroscopes, which are the most critical and necessary components of the towers are shown schematically in FIG. 3 and described below. To continue with regard to FIG. 1, the ground level or water level 7 is shown schematically. It is noted that the towers may be built on the ground or on the water, which allows the towers to be built at sea off shores, in rivers, in lakes, in bays and other bodies of water. 8 the tower foundations shall usually be steel reinforced concrete pilings, or other pilings, driven down to ground rock. The tower foundations may also be other suitable foundations as dictated by local conditions. However, it is emphasized here that the tower foundations are normally driven down to ground rock in order to provide the towers with solid foundations.

Fig. 2 is a perspective drawing of the side view of the current invention. FIG. 2 shows the following: 1 the cable reinforced air supported structure that serves as weather protection for the 2 radar antenna. Also 1 may contain the surveillance radar equipment, communications equipment and other related equipment as required. 3. The location of the laser cannon (and other ordinance equipment and other devices required as armament measures required to defend against incoming detected missiles and other threats. 4 the structural clamps as required to support the large heavy gyroscopes onto the towers are so indicated. 5 the structural clamps required to support the large heavy gyroscopes onto the towers. 6 the large heavy gyroscopes assemblies are schematically shown. The typical inner working components of the gyroscopes, which are the most critical and necessary components of the towers are shown schematically in FIG. 3 and described below. To continue with regard to FIG. 2, the ground level or water level 7 is shown schematically. It is noted that the towers may be built on the ground or on the water, which allows the towers to be built at sea off shores, in rivers, in lakes, in bays and other bodies of water. 8 the tower foundations shall usually be steel reinforced concrete pilings, or other pilings, driven down to ground rock. The tower foundations may also be other suitable foundations as dictated by local conditions. However, it is emphasized here that the tower foundations are normally driven down to ground rock in order to provide the towers with solid foundations.

FIG. 3 denotes a perspective drawing of a gyroscope, and shows the components of a gyroscope. 9 denotes the gyroscope rotor which is the main gyroscope component that spins in the 13 gyroscope frame. The high speed spinning of the gyroscope rotor imparts the necessary high gyroscopic moment to the gyroscope. The high gyroscopic moment of the gyroscope provides the required balance and stability to the towers. 10 the rotor outer perimeter contains the maximum weight of the rotor, which imparts the maximum stabilizing gyroscopic moment to the gyroscope. The amount of weight placed in the 10 rotor perimeter is dependent upon fabrication techniques, the tensile strength of the rotor materials and other factors. 12 the thrust bearings serve to retain the 9 and 10 gyroscope rotor structurally and properly attached to the 13 gyroscope frame. The 12 magnetic thrust bearings are electronically controlled. This provides electronic control of such factors as unwanted vibration and other unwanted factors by the use of electronic damping. 11 the radial bearings of the 9 and 10 gyroscope rotor. 11 the radial bearings are connected to the 13 gyroscope frame but do not rotate with the 9 and 10 rotor or the 14 rotor shaft. 11 the magnetic radial bearings are electronically controlled. This provides electronic control of such factors as unwanted vibration and other unwanted factors by the use of electronic damping. 14 the rotor shaft is normally steel, or another suitable magnetic material, as required for the proper functioning of the magnetic thrust bearings and the magnetic radial bearings to perform. This maximizes rotor spin life by eliminating all metal-to-metal wearing contact between the spinning rotor 11 and 12,

the gyroscope frame by controlling and restricting the location of the 14 rotor shaft using powerful magnetic flux, provided by powerful electro-magnets, rather than by the more well known means of metal to metal bearings which introduces metal-to-metal wearing contact accompanied by friction drag. This use of 12 magnetic thrust bearings and 11 magnetic radial bearings extends the expected maintenance free life of the gyroscopes to an estimated 200 years, providing there is no interruption of electric power to the magnetic bearings. Note: significant and large electric power is being continually generated by the towers themselves.

Fig. 4 denotes a perspective drawing of an air supported and cable-reinforced 200 foot in diameter air supported structure showing the reinforcing cables at intervals of approximately every 30 feet of the perimeter of the structure that is constructed of 5 mil thick Mylar polyester film. Air supported structures are normally built in the form of a hemisphere, but are also built in the shape of a Quonset structure to cover rectangular areas, such as swimming pools. All air supported structures are firmly supported by air that is maintained at a slightly higher pressure, of 5 psf higher than the air outside the air supported structure. This pressure differential is maintained electronically. Reinforcing cables are used to enable air supported structures to withstand very high wind conditions and other severe weather conditions. Each of the reinforcing cables are firmly and structurally attached to the ground or to the platform supporting the air supported structure. In Figure 4, at the lower right of the structure there is an air lock to enable entrance into the structure by trucks delivering building materials for the building being constructed inside the air supported structure with a minimal or no reduction of the air pressure inside the structure. Air supported structures are made of flexible films or materials such as, but not limited to, the following: Mylar polyester film a clear transparent DuPont product with a very high tensile strength of 25,000 psi that approaches the tensile strength of steel. Mylar is a long chain polymer composed of a cast film of polyethylene terephthalate that is orientated by being stretched in both the transverse direction and the longitudinal directions during it's manufacture; this process causes the molecules of the film to link, forming the long chains that contribute to the strength and other properties of the film. Other materials used for air supported structures include various vinyl films, hypalon coated nylon cloth, vinyl coated nylon cloth, Dacron and other cloths coated or not coated. Air supported structures are light weight, low cost structures normally used for the storage of materials and other uses.

Fig. 5 is an actual picture of a 60 foot diameter hemispheric shaped air supported structure, made of 5 mil thick Mylar polyester film, that does not require the use of reinforcement cables for stability in winds of 60 miles per hour to 100 miles per hour.

SPECIFICATION

Title of Invention: Harrison Gyroscopes-Stabilized Free Standing Towers And Missile Defense Systems.

Detailed Description: The present invention relates to the use of multiple large and heavy (10,000 pounds to 24,000 pounds and heavier) gyroscopes that provide balance and stabilization to very high (1000 feet to 500,000 feet high) free-standing towers that thereby do not require use of supporting cables or other structural means to provide balance and stability to the towers. These gyroscopes-stabilized free standing towers support and contain anti-missile defense radar, communications systems and defensive weapons to protect the USA and it's Allies against enemy cruise missiles, ICBMs and manned or unmanned aircraft and other unwanted or unlawful USA border penetrations. The above towers also provide border defense for the USA and USA Allies and deployed USA and USA Allies armed forces. Defensive weapons on or connected by communication systems to the towers would include, but shall not be limited to, anti-missile missiles, USA defensive aircraft, Directed Energy Weapons (but would not be limited to) DEW (directed energy weapons) such as HEL (High Energy Laser) weapons and HECW (High Energy Carrier Wave) weapons. The system described above would provide the lowest cost option for positioning defensive systems where look down surveillance, look over-the-natural-horizon surveillance, look-up surveillance and high electric power requirements, required to power the defensive weapons and other uses, are a major military consideration and are a military requirement. The design technique would include:

1. The use of very large and heavy (10,000 pounds to 24,000 pounds, and much higher) gyroscopes with very large gyroscopic moments to provide high tower balance and stability. The towers so balanced and stabilized shall therefore not require the use of structural cables or other stabilizing structures to provide tower balance and tower stability.
2. The gyroscopes described in 1 above shall be firmly secured to the towers every 100 feet; the axis of rotation of the gyroscope rotors shall be identical to the vertical center line of the tower. The gyroscopes shall weigh some 10,000 pounds to 24,000 pounds, or higher, with most gyroscope rotor weight concentrated at the perimeter of the gyroscope, and the rotor of the gyroscopes shall be rotating at the highest speed that the strength of the material from which the gyroscopes rotors are constructed will allow and still not fly apart, which shall be 2,500 RPM to 15,000 RPM, or higher, if the strength or other properties of the material from which the gyroscope rotors are made will permit. Further, the rotor thrust bearings and radial bearings shall be the best available, of metal or other material or materials, to promote the maximum effective lifetime of the gyroscopes. Accordingly, the thrust bearings and radial bearings shall be magnetic bearings, which shall contain the rotors of the gyroscopes in a magnetic flux, thereby eliminating all metal-to-metal wearing contact of the gyroscope rotors, which are the major moving part in the gyroscopes. This shall prolong the maintenance free lifetime of the rotors to an estimated 200 or more

years, provided that electric power to the gyroscopes is not interrupted. Note that electric power is continually generated by the towers themselves. The gyroscopes shall be contained in hermetically sealed containers to improve their lifetime..

3. The tower vertical structural supporting legs shall be round, square, rectangular or any other shape in cross-section; shall be made of a clear material such as Lucite, or any other suitable material; and shall contain or support photo-electric panels for the purpose of generating electric power. There shall be at least one structural supporting leg or many more structural supporting legs as required by structural requirements or electric power requirements. Note that the structural legs shown in Figure 1 and Figure 2 show six (6) structural tower legs. More structural legs shall be used as and if required structurally or as required for electric power generation purposes.

4. The towers shall have wind power electric power generators attached as often as is practical. Our plan is to attach such wind power generators every 50 feet of tower height.

5. Radar antenna shall be attached at the top of the towers, and every 1000 feet of tower height. The antenna and associated equipment shall be weather protected via an air-supported cable-reinforced structure or by other means.

6. A special pressurized elevator shall be attached to each tower to enable access to the radar antenna, radar equipment and other servicing as needed.

CLAIMS

1. Very tall towers that are 1000 feet tall to 500,000 feet tall, and higher, that contain large heavy gyroscopes every 100 feet of tower height that weigh 10,000 pounds to 24,000 pounds, or even heavier, to balance and stabilize the towers, thus negating the need to use cables or other structures to provide balance and stability for the towers, the system comprising:
 - (a) the towers shall contain and support multiple surveillance radar equipments, multiple radar antennas, both military or commercial communications equipments, defense coordination equipments and defensive weapon systems to defend the USA and USA allies against cruise missiles, ICBM's, manned or unmanned aircraft, as well as to defend against all hostile, harmful, unlawful or unwanted violations of USA borders;
 - (b) the use of clear or other structural members (such as Lucite, steel, carbon composite fiber or other materials) suitable to contain, or support, photoelectric power panels for the purpose of generating significant electric power;
 - (c) the use of wind power electric generators attached every 50 feet of tower height, either more or less, on the high free-standing towers for generating significant electric power; and
 - (d) the use of special pressurized elevators to construct, service and maintain the high 1000 feet high to 500,000 feet high, and higher, free-standing military, communication, commercial and power generation towers.
2. The use of the current invention as a primary source for generating electric power which is both non-polluting to the environment and renewable; such electricity shall be herein afterwards referred to as green electric power; green electric power generation does not pollute the air, the earth, or any other aspect of our environment, as does electricity generated using such fuels as petroleum, coal, natural gas, nuclear fuel and all other such non-renewable fuels that shall eventually be depleted, the system comprising:
 - (a) wind power electrical power generators placed every 50 feet or more of tower height; and
 - (b) photoelectric power panels inside of, or attached to, the tower structural legs.

3. The system of claim 2, at heights of 50,000 feet to 100,000 feet or higher, generating the equivalent of the electric power generated by a conventional power plant fueled by coal, petroleum, natural gas or nuclear fuel and at an estimated cost of 25% to 10% of the cost of generating electricity using conventional fuels.
4. The system of claim 2 further using green electric power to aerate the streams, rivers, bays and virtually all other waterways, which are now dangerously polluted, are actually expiring, and are technically and literally in the process of becoming barren of underwater life, due primarily to the lack of dissolved oxygen, caused by human pollution from storm water run-off, improperly designed and improperly managed waste water treatment plants, and the improper and excessive use of chemical fertilizer needed to produce food for humans.
5. The system of claim 2 further using the wide-spread generation and use of this green electric power to reduce the USA's existing dependency upon foreign oil sources.
6. The system of claim 2, if cost-shared with claim 1, would further reduce the cost of green electric power, and thus would escalate the importance of claim 2's feature of the gyroscopes-stabilized free- standing towers.

CHANGE OF CORRESPONDENCE ADDRESS Application	Application Number	10166372
	Filing Date	11/28/02
	First Named Inventor	W. J. Bruce S. Harrison
	Art Unit	3672
	Examiner Name	Ms. Kimberly T. Woods
Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450		Attorney Dockel Number

Please change the Correspondence Address for the above identified patent application to:

☐ This address associated with Customer Number:

OR

☒ Firm or Individual Name: William E. Harrison, Jr.

Address: 1581 Perdido Court

City: Melbourne State: Florida Zip: 32940

Country: USA

Telephone: (321) 752-5489 Fax: (321) 253-8881

This form cannot be used to change the data associated with a Customer Number. To change the data associated with an existing Customer Number use "Request for Customer Number Data Change" (PTO/SB/124).

I am the:

☒ Applicant/Inventor

☐ Assignor of record of the entire interest.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/98).

☐ Attorney or agent of record. Registration Number: _____

☐ Registered practitioner named in the application (transferee status in an application without an executed oath or declaration). See 37 CFR 1.33(a)(1). Registration Number: _____

Signature: William E. Harrison, Jr.

Typed or Printed Name: William E. Harrison, Jr.

Date: October 18, 2004 Telephone: (321) 752-5489

NOTE: Signatures of all the inventors or assignors of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required. See below.

☐ Total of: 1 forms are submitted.

This collection of information is required by 37 CFR 1.05. The information is required to obtain or retain a benefit by the public which is to be paid by the USPTO to support an application. Confidentiality is governed by 35 U.S.C. 422 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual user. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FILES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

CHASE BANK ONE.

CUSTOMER SERVICE
 In U.S. 1-800-435-7327
 Español 1-888-442-3308
 TDD 1-800-965-2060
 Outside U.S. call collect
 1-302-394-8200

Account Number: 4417 1221 6838 6945

Total Credit Line	\$24,000
Available Credit	\$21,951
Cash Access Line	\$4,800
Available for Cash	\$4,800

ACCOUNT INQUIRIES

P.O. Box 15298
Wilmington DE 19855-5298

PAYMENT ADDRESS

P.O. Box 15153
Wilmington, DE 19806-5153

VISIT US AT:

WWW.CXDO.COM/CR-MCA-DE

TRANSACTIONS

Trans Date	Reference Number	Merchant Name or Transaction Description	Credit	Debit
03/17	24323905977354078010040	ADVANTAGE TECHNICAL SE SILVER SPRING MD		\$137.60
03/21	2459216580000069243951	DTV DIRECTV SERVICE 800-347-3288 CA		53.17
03/22	24224435082275165460198	MCDONALD'S 11155 ST AUGUSTINE FL		15.84
03/21	24164375591491595168040	APPLEBEE'S S-P20600173 PERRY GA		20.83
03/22	2432668582688000273284	ADVANCE AUTO PARTS #9530 ST AUGUSTINE FL		11.86
03/28	24399005087142043789274	WALGREEN 300831818 ROCKLEDGE FL		24.75
03/30	24431885009990007578978	THE S.F. TRAVIS COMPANY COCOA FL		10.56
03/28	2427538508303358014840	SUNTREE AUTOMOTIVE ROCKLEDGE FL		136.12
03/30	241382050803270933030528	LOWE'S #1506 ROCKLEDGE FL		2.00
04/01	244318850091980000075780	THE S.F. TRAVIS COMPANY COCOA FL		24.16
03/31	24301285092050920193247	US PATENT/TRADEMARK OF 705-3086068 VA		305.00
03/31	24445003091190412699899	WINN-DIXIE #2316 SH ROCKLEDGE FL		8.97
04/02	24164055082379000057921	EXXONMOBIL26 05726288 ROCKLEDGE FL		29.60
04/02	24275385093040092018742	SUNTREE AUTOMOTIVE ROCKLEDGE FL		109.53
04/07		LATE FEE		38.00
04/08	24224435099304335200990	NIK'S RESTAURANT MELBOURNE FL		29.38
04/07	241982955096327070513834	LOWE'S #1806 ROCKLEDGE FL		56.34
04/17	24455015107149011110412	WAL-MART #3538 VIERA (MELRO FL		4.33
04/18	2444574510712991684570	OFFICE DEPOT #284 MERRITT ISLAND FL		42.87

FINANCE CHARGES

PERIODIC RATE(S) AND APR(S) MAY VARY

Category	Daily Periodic Rate 21 days in cycle	Corresponding APR	Average Daily Balance Previous Cycle	Average Daily Balance Current Cycle	Finance Charge Due To Periodic Rate	Transaction Fee	FINANCE CHARGES
Purchases	05688%	21.43%	\$386.19	\$1,575.76	\$35.12	\$0.00	\$35.12
Cash advances	05688%	21.43%	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Total finance charges

Effective Annual Percentage Rate (APR): 21.49%

The Corresponding APR is the rate of interest you pay when you carry a balance on purchases or cash advances. The Effective APR represents your total finance charges, including transaction fees such as cash advance and balance transfer fees, expressed as a percentage.

CHASE BANK ONE

Amgen Enkay

Make your check payable to Chase Card Services.
New address or e-mail? Print in block.

4417122168386745000012000000617309

CARDMEMBER SERVICE
PO BOX 15153
WILMINGTON DE 19855-5153

.....

NAME	DATE	TIME	SCORE	REMARKS
1. M. J. ...	...	...	...	...
2. ...	...	...	...	...
3. ...	...	...	...	...
4. ...	...	...	...	...
5. ...	...	...	...	...
6. ...	...	...	...	...
7. ...	...	...	...	...
8. ...	...	...	...	...
9. ...	...	...	...	...
10. ...	...	...	...	...
11. ...	...	...	...	...
12. ...	...	...	...	...
13. ...	...	...	...	...
14. ...	...	...	...	...
15. ...	...	...	...	...
16. ...	...	...	...	...
17. ...	...	...	...	...
18. ...	...	...	...	...
19. ...	...	...	...	...
20. ...	...	...	...	...
21. ...	...	...	...	...
22. ...	...	...	...	...
23. ...	...	...	...	...
24. ...	...	...	...	...
25. ...	...	...	...	...
26. ...	...	...	...	...
27. ...	...	...	...	...
28. ...	...	...	...	...
29. ...	...	...	...	...
30. ...	...	...	...	...
31. ...	...	...	...	...
32. ...	...	...	...	...
33. ...	...	...	...	...
34. ...	...	...	...	...
35. ...	...	...	...	...
36. ...	...	...	...	...
37. ...	...	...	...	...
38. ...	...	...	...	...
39. ...	...	...	...	...
40. ...	...	...	...	...
41. ...	...	...	...	...
42. ...	...	...	...	...
43. ...	...	...	...	...
44. ...	...	...	...	...
45. ...	...	...	...	...
46. ...	...	...	...	...
47. ...	...	...	...	...
48. ...	...	...	...	...
49. ...	...	...	...	...
50. ...	...	...	...	...
51. ...	...	...	...	...
52. ...	...	...	...	...
53. ...	...	...	...	...
54. ...	...	...	...	...
55. ...	...	...	...	...
56. ...	...	...	...	...
57. ...	...	...	...	...
58. ...	...	...	...	...
59. ...	...	...	...	...
60. ...	...	...	...	...
61. ...	...	...	...	...
62. ...	...	...	...	...
63. ...	...	...	...	...
64. ...	...	...	...	...
65. ...	...	...	...	...
66. ...	...	...	...	...
67. ...	...	...	...	...
68. ...	...	...	...	...
69. ...	...	...	...	...
70. ...	...	...	...	...
71. ...	...	...	...	...
72. ...	...	...	...	...
73. ...	...	...	...	...
74. ...	...	...	...	...
75. ...	...	...	...	...
76. ...	...	...	...	...
77. ...	...	...	...	...
78. ...	...	...	...	...
79. ...	...	...	...	...
80. ...	...	...	...	...
81. ...	...	...	...	...
82. ...	...	...	...	...
83. ...	...	...	...	...
84. ...	...	...	...	...
85. ...	...	...	...	...
86. ...	...	...	...	...
87. ...	...	...	...	...
88. ...	...	...	...	...
89. ...	...	...	...	...
90. ...	...	...	...	...
91. ...	...	...	...	...
92. ...	...	...	...	...
93. ...	...	...	...	...
94. ...	...	...	...	...
95. ...	...	...	...	...
96. ...	...	...	...	...
97. ...	...	...	...	...
98. ...	...	...	...	...
99. ...	...	...	...	...
100. ...	...	...	...	...

OWAS BERT 1981 CT
JEAN H HARRISON
WILBUR E HARRISON
1981 PERDIED CT
MELBOURNE FL 32940-6226

00000000000000000000000000000000

CHASE BANK ONE

Statement Date	04/19/05	05/18/05
Payment Due Date		06/07/05
Minimum Payment Due		\$12.00

CUSTOMER SERVICE
In U.S. 1-800-436-7927
Español 1-888-446-2808
TDD 1-800-855-8060
Outside U.S. Call Collect 1-202-594-3000

VISA ACCOUNT SUMMARY

Account Number: 4417 1221 6839 6835

Previous Balance	\$2,048.10
Payment Credits	\$2,122.22
Purchased Cash Deals	+\$675.34
Finance Charges	+\$15.08
New Balance	\$617.30

Total Credit Line	\$24,000
Available Credit	\$23,382
Cash Access Line	\$4,800
Available for Cash	\$4,800

ACCOUNT INQUIRIES
P.O. Box 15298
Wilmington, DE 19860-5298

PAYMENT ADDRESS
P.O. Box 15153
Wilmington, DE 19846-5153

VISIT US AT:
www.chase.com/creditcards

TRANSACTIONS

Trans	Date	Reference Number	Merchant Name or Transaction Description	Credit	Debit	Amount
04/19	2445501510940450003914967		TUESDAY MORNING #559 MELBOURNE FL			2152.50
04/18	24761875109507407011095		CANON ESTORE 800-365-2155 CA			46.47
04/21	24401405111001361048869		USPS 1169100440 ROCKLEDGE FL			23.70
04/21	24692165111000152575865		DTV DIRECTV SERVICE 800-347-3285 CA			53.17
04/22	24135295113327159425927		LOWE'S #1508 ROCKLEDGE FL			93.55
04/23	24801335114115000100420		GRANDPA'S STEAK HOUSE OF COCOA FL			26.56
04/25	244014051115001361067804		USPS 1169100440 ROCKLEDGE FL			7.90
04/25	241352951152327179929905		LOWE'S #1508 ROCKLEDGE FL			10.73
04/26	24301685118051160423314		US PATENT TRADEMARK OFFICE WASH DC VA			68.00
04/20	241550151119145002337764		WAL-MART #0956 MELBOURNE FL			63.29
04/26	243230151110513105017364		BEACH UNLMTD #756 COCOA BCH FL			16.94
04/26	243230151110513105017872		BEACH UNLMTD #756 COCOA BCH FL			3.17
05/02	1122122200000245733259		PAYMENT - THANK YOU	2,048.10		
05/01	7426585122589200902374		Late Fee Reversal DE	59.00		
05/01	742658512232500000022360		Finance Charge Reversal DE	35.12		
05/04	244014051134001361352112		USPS 1169100440 ROCKLEDGE FL			23.70
05/04	24399005124142069614344		WALGREEN 00061512 ROCKLEDGE FL			12.99
05/04	241352951125307200029069		LOWE'S #1508 ROCKLEDGE FL			9.54
05/08	24325885125205098200304		DURANGO STEAKHOUSE #003 MELBOURNE FL			33.65
05/16	241352951137327300561167		LOWE'S #1508 ROCKLEDGE FL			37.68
05/16	244981351373273004815365		CAPT. MULLET'S BAIT & TACK MELBOURNE FL			0.88

FINANCE CHARGES

PERIODIC RATE(S) AND AFR(S) MAY VARY

Category	Daily Periodic Rate 30 days in cycle	Corresponding APR	Average Daily Balance	Finance Charge Due To Periodic Rate	Transaction Fee	FINANCE CHARGES
Purchases	0.5967%	21.74%	\$899.74	\$15.00	\$0.00	\$15.00
Cash advances	0.5967%	21.74%	\$0.00	\$0.00	\$0.00	\$0.00

Scanned to Microsoft Word; File: 5984200.doc; Saved to HD E, CD-R 3, CD-RW 3 & FD # 154.

Combined to Microsoft Word; File: 5984247.doc; Saved to HD E, CD-R 3, CD-RW 3 & FD 154.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 10
 Alexandria, Virginia 22313-1000
 www.uspto.gov

APPL. NO.	FILING OR 371 (c) DATE	ART. UNIT	FL. FEE REC'D	ATTY. DOCKET NO.	DRAWINGS	TOT. CLMS.	IND. CLMS.
10/939,297	09/13/2004	3641	450		4	6	2

Wilbur E. Harrison, Jr.
 1581 Perdido Court
 Melbourne, FL 32940

CONFIRMATION NO. 3442

UPDATED FILING RECEIPT



0000000016005390

Date Mailed: 05/12/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Wilbur Ernest Harrison, Baltimore, MD;

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CIP of 10/065,872 11/28/2002 ABN

Foreign Applications

If Required, Foreign Filing License Granted: 05/12/2005

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/939,297**

Projected Publication Date: 08/18/2005

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title: Harrison gyroscopes-stabilized free standing towers and missile defense systems

Preliminary Class
 089

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPL. NO.	FILING OR 371 (a) DATE	ART. UNIT	FIL. FEE REC'D	ATTY. DOCKET NO.	DRAWINGS	TOT. CLMS	IND. CLMS
10/939,297	09/13/2004	3641	450		4	6	2

Wilbur E. Harrison, Jr.
 1581 Perdido Court
 Melbourne, FL 32940

CONFIRMATION NO. 3442

UPDATED FILING RECEIPT



0000000018003590

Date Mailed: 05/12/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Wilbur Ernest Harrison, Baltimore, MD

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CIP of 10/065 872 11/26/2002 ABN

Foreign Applications

If Required, Foreign Filing License Granted: 05/12/2005

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/939,297**

Projected Publication Date: 08/18/2005

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title: Harrison gyroscopes-stabilized free standing towers and missile defense systems

Preliminary Class
 089

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time. If the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12. If a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

Revised Power of Attorney Practice - 37 CFR 1.32
(Applies to powers of attorney filed on or after June 25, 2004)

As a result of a revision of the patent rules relating to powers of attorney, a power of attorney filed on or after June 25, 2004 must either appoint:

- a) One or more joint inventors; OR
- b) Those registered practitioners associated with a Customer Number; OR
- c) Ten or fewer patent practitioners, either in the power of attorney itself, or by a listing in a separate paper accompanying the power of attorney, as explained below.

See (newly established) 37 CFR 1.32(b) and (c), the text of which is as follows:

(b) A power of attorney must:

- (1) Be in writing;
- (2) Name one or more representatives in compliance with (c) of this section;
- (3) Give the representative power to act on behalf of the principal; and
- (4) Be signed by the applicant for patent (§ 1.41(b)) or the assignee of the entire interest of the applicant.

(c) A power of attorney may only name as representative:

- (1) One or more joint inventors (§ 1.45);
- (2) Those registered patent practitioners associated with a Customer Number;
- (3) Ten or fewer registered patent attorneys or registered patent agents (see § 10.6 of this subchapter) (patent practitioners). Except as provided in paragraph (c)(1) or (c)(2) of this section, the Office will not recognize more than ten patent practitioners as being of record in an application or patent. If a power of attorney names more than ten patent practitioners, such power of attorney must be accompanied by a separate paper indicating which ten patent practitioners named in the power of attorney are to be recognized by the Office as being of record in application or patent to which the power of attorney is directed.

The filing receipt reflects the power of attorney that has been entered for the application. If the power of attorney appointed more than ten patent practitioners, without reference to a Customer Number and without a separate paper indicating which ten patent practitioners named in the power of attorney are to be recognized, then no patent practitioner has been made of record.

How to take corrective action: Resubmit a copy of the power of attorney along with a separate paper indicating which up to ten patent practitioners named in the power of attorney are to be recognized by the Office as being of record in the application or patent to which the power of attorney is directed, or file a newly executed power of attorney in compliance with 37 CFR 1.32.

After receipt of such a submission, the patent practitioners listed on the separate paper or new power of attorney in compliance with 37 CFR 1.32 will be recognized as being of record. For additional information regarding this change in practice, see: *Revision of Power of Attorney and Assignment Practice*, 69 Fed. Reg. 29865 (May 26, 2004), 1283 Off. Gaz. 148 (Jun. 22, 2004) and <http://www.uspto.gov/eol/office/pat/dapp/poatnas.htm>.

August 11, 2004

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.